R E P O R T R E S U M E S

ED 020 812 RC 000 405

EAU CLAIRE COUNTY STUDY, PHASE II 1964-65.

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REPORT NUMBER NIMH-GNO-2-R11-672-04 PUB DATE 30 APR 65
EDRS PRICE MF-$1.00 HC-$10.12 251P.

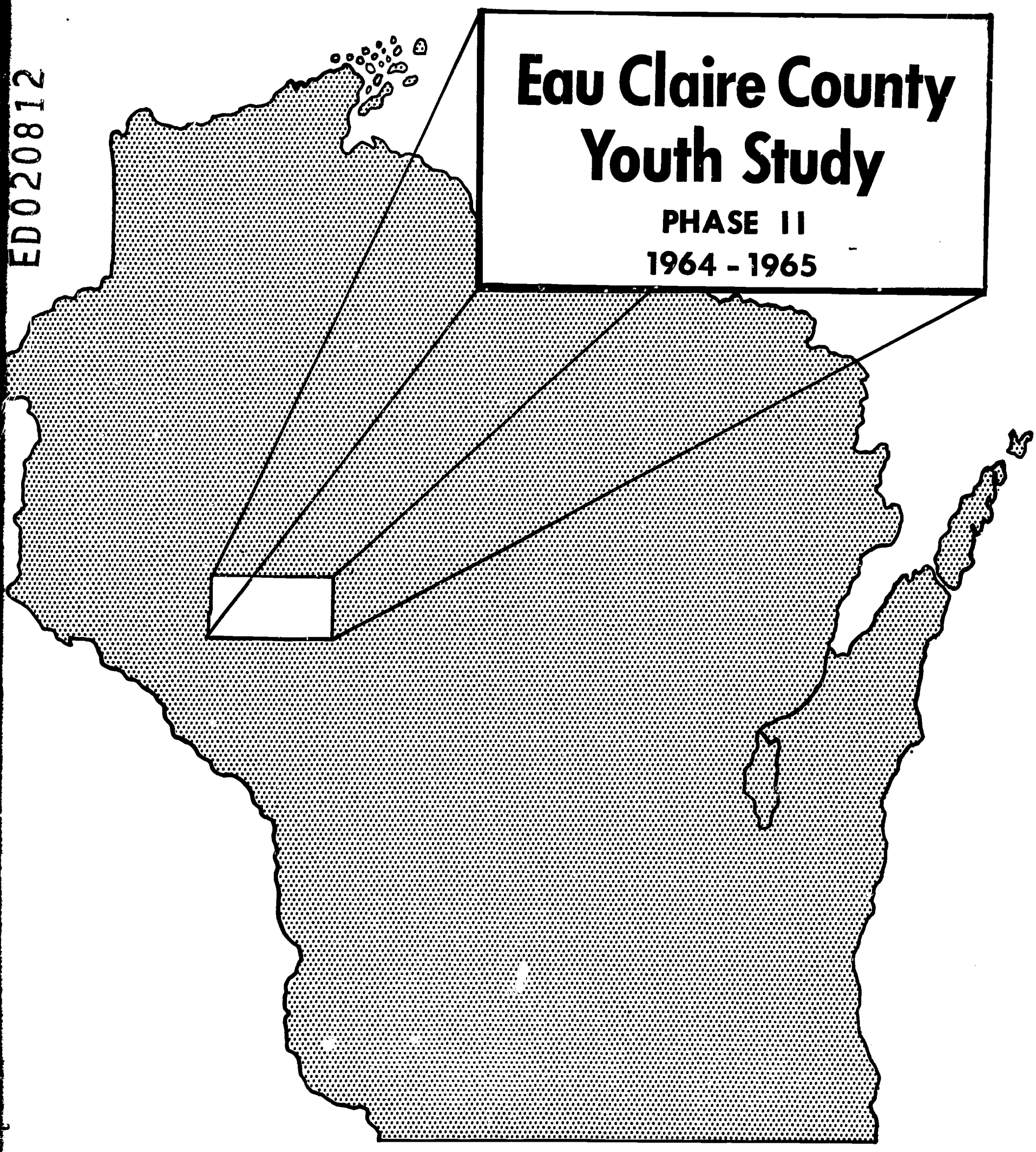
DESCRIPTORS- *CHILDHOOD ATTITUDES, DELINQUENT BEHAVIOR, *DISCIPLINE, *DISCIPLINE POLICY, DISCIPLINE PROBLEMS, DISADVANTAGED ENVIRONMENT, DISADVANTAGED YOUTH, HEALTH NEEDS, *INTERVIEWS, MEASUREMENT TECHNIQUES, PARENTAL BACKGROUND, PARENT PARTICIPATION, PARENT SCHOOL RELATIONSHIP, POLICE SCHOOL RELATIONSHIP, POTENTIAL DROPOUTS, *PROBLEM CHILDREN, RATING SCALES, RURAL EDUCATION, RURAL FAMILY, DELINQUENCY IDENTIFICATION, DELIQNUENCY PREVENTION, FLINT YOUTH STUDY,

THE EAU CLAIRE COUNTY YOUTH STUDY INVOLVED 384 STUDENTS CLASSIFIED ON THE BASES OF DOMICILE (RURAL OR URBAN), AND BEHAVIOR IN THE CLASSROOM (SOCIALLY APPROVED OR DISAPPROVED). A BATTERY OF TESTS, INTERVIEWS, AND OBSERVATIONS FOCUSED ON THE DELINQUENCY PRONENESS, PSYCHOLOGICAL ADJUSTMENT, AND FAMILY BACKGROUND OF THE CHILDREN. THE FINDINGS OF THIS STUDY CONFIRMED EARLIER RESULTS THAT THERE EXISTS A HIGH POSITIVE CORRELATION BETWEEN DELINQUENCY PRONENESS AND CLASSROOM BEHAVIOR. RESULTS INDICATED THAT THOSE CHILDREN WHO EXHIBITED DISAPPROVED CLASSROOM BEHAVIOR AND WHO WERE DELINQUENCY PRONE WERE CHARACTERIZED AS HAVING INADEQUATELY DEVELOPED RESPONSE MECHANISMS TO QUERIES BY TEACHERS AND PEERS, AS SEEING ADULTS FROM A NEGATIVE VIEWPOINT, AND AS USUALLY WATCHING EXCESSIVE AMOUNTS OF TELEVISION AT THE EXPENSE OF STUDY TIME. THE STUDY CONCLUDED THAT THE SCHOOL MUST ASSUME THE RESPONSIBILITY OF PROVIDING COMPENSATION THROUGH ENRICHED CURRICULUM FOR DISADVANTAGES WITH WHICH THE CHILD MUST LIVE. RELATED DOCUMENTS ARE RC 000 557, RC 000 406, AND ED 014 335. (DA)

Eau Claire County Youth Study

PHASE II

1964 - 1965



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This investigation was supported by Public Health Service Research Grant No. 2 R11 672-04, from the National Institute of Mental Health.

April 30, 1965

ACKNOWLEDGEMENTS

Many people have helped with th re-search described in this report. The project was undertaken as a community venture, and thus cooperation was required from many quarters.

In particular, we should like to express our gratitude to the following public and parochial school administrators: Anna Johnson Thorpe, Homer E. DeLong, Father John D. Rossiter, Einar C. Pedersen, Wallace C. Westlund, William W. Kean, and Michael J. Laverty.

The health data in this study were secured through the cooperation of John Bacharach, Director of the City-County Health Department and his staff.

We are also indebted to Chief of Police, Harold L. MacLaughlin, and to Sheriff Lloyd H. Thompson, and Chief Deputy Sheriff, Roger R. Hahn, for their cooperation.

To Dr. John Paterson, Director of Educational Research, and to Barbara McCullogh of the Computer Sciences Center, Purdue University, goes a special note of gratitude for their invaluable statistical and research design consultation.

IN MEMORIAM

This second phase of the Eau Claire County Youth Study was marked by the death of one member of the research staff, Mrs. Erma Hertzfeldt Harstad, who joined the staff at its inception in 1961. Mrs. Harstad's long experience and early training in psychiatric social work and psychology equipped her well for her work in this study. She was responsible for the selection, training, and supervision of the interviewers who gathered the original data. She also participated in various other aspects such as reviewing relevant research and theoretical literature, interpreting results and preparing manuscripts. Perhaps her major contribution in later phases of the study came from her deeply insightful analysis of the research of the Gluecks on the social factors for predicting delinquency.

Mrs. Harstad's life was devoted to social service. Her deep concern for human welfare was reflected in the talent and experience she contributed to this study.

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PUBLICATIONS

Phase I

1. Feldhusen, J. F.; Thurston, J. R.; and Hertzfeldt, E. "Summary-Background Factors in the Lives of Children Who Display Aggressive and Disruptive Behavior in the Classroom" - Eau Claire Public Schools Elementary Teachers' Bulletin, Vol, XV, No. 2, November, 1963.

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Phase II

1. Benning, J. J.; Feldhusen, J. F.; and Thurston, J. R. "A Study of Children Who Display Aggressive Behavior in the Classroom," Wisconsin Journal for Curriculum Leadership, Winter 1964-65, Vol. 2, No. 1, pp. 19-22.

2. Feldhusen, J. F.; Thurston, J. R.; and Ager, E. G. "Delinquency Proneness of Urban and Rural Youth," Journal of Research in Crime and Delinquency. In press.

3. Feldhusen, J. F.; Thurston, J. R.; and Benning, J. J. "Sentence Completion Responses of Children Whose Classroom Behavior is Socially Approved or Disapproved," submitted for publication.

PRESENTATIONS

Phase I

1. Feldhusen, J. F. and Thurston, J. R. "Development of a Modified Form of the KD Proneness Scale for Children at the Third Grade Level," at the annual meeting of the American Psychological Association, St. Louis, August, 1962.

2. Feldhusen, J. F. and Thurston, J. R. "Studying Urban and Rural Youth Who Display Aggressive Behavior Problems in School," at the National Conference on Crime and Delinquency, Miami Beach, June, 1963.

3. Feldhusen, J. F.; Thurston, J. R.; and Hertzfeldt, E. "Background Factors in the Lives of Children Who Display Aggressive and Disruptive Behavior in the Classroom," at the annual meeting of the American Educational Research Association, Chicago, February, 1964.

4. Thurston, J. R. "Eau Claire County Youth Study, An Explanation of Its Design and Comments on the Conduct of the Research," at the Vermont Youth Study Conference for Social Scientists, January, 1962.

5. Thurston, J. R. "Prospectus: Eau Claire County Youth Study," at the Third Annual Vermont Youth Study Conference, January, 1962.

6. Thurston, J. R. and Feldhusen, J. F. "An Analysis of the Responses of Socially Approved and Disapproved Children to Descriptions of Frustrating Situations," at the annual meeting of the American Educational Research Association, Chicago, February, 1963.

7. Thurston, J. R.; Feldhusen, J. F.; and Benning, J. J. "Relation of Delinquent Tendencies to Classroom Behavior," at the annual meeting of the American Educational Research Association, Chicago, February, 1964.

Phase II

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2. Feldhusen, J. F. and Benning, J. J. "Delinquency Proneness, Family Background, Adjustment, and Classroom Behavior of Third, Sixth, and Ninth Grade Children," at the annual meeting of the American Educational Research Association, Chicago, February, 1965.

3. Thurston, J. R.; Feldhusen, J. F.; and Benning, J. J. "Summary of the Eau Claire County Youth Study and Some Suggestions for Teachers," at the meeting of the West Central Wisconsin Personnel and Guidance Association, Stout State University, Menomonie, Wisconsin, September, 1964.

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INTRODUCTION

The Eau Claire County Youth Study represents the culmination of many years of work and the efforts of many people. An application for financial support of the first phase of the study was submitted to the National Institutes of Health in 1960 and approved in 1961. On May 1, 1961 formal operation of this research project began with Dr. John R. Thurston as Project Director. Assisting him at the outset were Dr. James J. Benning, Dr. John F. Feldhusen, Miss Erma Hertzfeldt, and Mrs. Elvira Ager. At a community advisory level, there was a committee of prominent local citizens. Several members of the Division for Children and Youth of the Wisconsin Department of Public Welfare also acted as close consultants in the development and operation of the project, particularly Mrs. Veda Stone, Dr. James F. Lewis, Mr. Paul Kusuda, Dr. William Lentz, and Mr. John Mannering.

This was a community-based research involving children who displayed socially approved and socially disapproved behavior in school. These children were to be nominated by classroom teachers. The study was to focus on the delinquency proneness, psychological adjustment, and family background characteristics of these children. The sample of 384 children included equal numbers of third, sixth, and ninth graders, males and females, urban and rural, and approved and disapproved children.

A study of youth, similar to the Eau Claire project, had been conducted in Flint, Michigan (Flint Youth Study, 1959). Some of the techniques, instruments, and research procedures utilized in the Eau Claire study had been employed in the Flint study. In addition, special tests, interview questionnaires, and rating forms were developed for use at Eau Claire. Two well known delinquency prediction scales were also to be used

at Eau Claire, the Glueck Social Factors for Prediction of Juvenile Delinquency and the Kvaraceus Delinquency Proneness Scale.

The field work of gathering data was carried forward by social workers and psychologists. They were well trained and highly supervised. Evaluation of their performance indicated that they did good work.

A tremendous amount of data was gathered by the interviewers. This necessitated the use of computers. When results began to emerge from the analyses, it was immediately apparent that the approved and disapproved children were indeed unique groups in many ways, many more than had been anticipated.

By April, 1964 a major report of Phase I, 1961-1964, of the Eau Claire County Youth Study was completed. It contained a veritable wealth of information, even more than had been anticipated in the original application. In all, 302 copies of this report have been distributed to researchers and educational institutions. Reactions have been received from researchers throughout the United States and from several foreign countries.

As the major report was being written, it became evident that additional analyses and data gathering was necessary in order to evaluate hypotheses and interest areas generated by this developing research. Complete investigation of health data, police and sheriff records, school achievement, and intelligence seemed to be mandatory to round out fully the picture of approved and disapproved youth.

There were also those children whose background and performance ran counter to what might be predicted on the basis of the conceptual framework of this research. Some who had been identified as delinquency prone by available indices were exhibiting socially approved classroom behavior

and correspondingly there was a "non-prone" group whom their teachers had rated as classroom "problems." A second look was needed to check on the causes of these false positive and negative identifications.

In addition, the researchers were concerned about the danger that the individual, the live, pulsating child might get lost in the generalizations that flow from comprehensive research involving hundreds of children. So it was felt that this possibility must, at least in some measure, be averted. The major themes and generalizations developed in the research were marshaled on one side, and a single case on the other side. A detailed, point by point description of the child was made in terms of these major research findings.

The interaction or interrelationships among all major variables seemed to constitute yet another potentially worthwhile area for investigation. The consistency of the picture of the approved and disapproved youth as developed in this research indicated that there must be substantial interrelationships. In line with this, it seemed advisable to attempt to predict classroom behavior via the technique of multiple regression.

It was necessary also to give additional attention to the Flint Youth Study (1959). The Eau Claire effort studied factors similar to those explored at Flint. Accordingly, there was a need to examine in detail all of the results of the two studies for which comparable data had been available.

Finally, there was a continuing need to publish and present the results of this research to interested and sometimes highly specific publics. Extensive time and effort were devoted to this task.

All of this work representing an extension of the previous work came to be known as Phase II, 1964-1965, of the Eau Claire County Youth Study.

The work of Phase II was detailed, submitted as an application for financial support to the National Institutes of Health, approved, carried out, and finally summarized in this report. At the time of this writing, four years of work have been completed. This report is submitted as a supplement to the report of Phase I, Classroom Behavior: Background Factors and Psycho-Social Correlates (Thurston, Feldhusen, and Benning, 1964).

The Phase II Report

This report is arranged in the form of chapters as follows:

Chapter 1 presents a full description of the analyses of the false positive and negative identifications in terms of delinquency proneness in relation to classroom behavior. The criterion for delinquency proneness was the composite score on the Glueck Social Factors for Prediction of Juvenile Delinquency.

Chapter 2 is devoted to the story of IQ and school achievement of the children who displayed approved and disapproved classroom behavior. Available school records of recent mental ability and achievement tests were used in these analyses.

Chapter 3 reports on the police and sheriff department contacts of these children. The uniform crime reporting procedures employed by city police departments and the county sheriff's department yielded reliable information for this analysis.

Chapter 4 offers information on these children's contacts with a health agency. The City-County Health Department of the city of Eau Claire and Eau Claire County provided the information used in this analysis.

Chapter 5 contains the statistical analysis of inter-relationships among major variables and the multiple regression analysis to predict classroom behavior as socially approved or disapproved. Since the predictor variables and the criterion were assessed at the same time this would more appropriately be called post-diction.

Chapter 6 reports the effort to compare the findings of the studies in Flint, Michigan and Eau Claire, Wisconsin with particular focus on interview responses of parents and children in the two communities.

Chapter 7 contains detailed description comparison of a single child with emphasis upon the major themes and generalizations derived from the data.

Chapter 8 attempts an objective evaluation of the adequacy and accuracy of the procedures involved in data-gathering.

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Chapter 1

Analysis of Approved Youth Who Scored High (Delinquency Prone) and Disapproved Youth Who Scored Low on Glueck Scales

Introduction

In his state of the union message on January 4, 1965, President Lyndon B. Johnson addressed particular attention to the problems of crime and delinquency which face our nation. He suggested that we must make renewed efforts to control and prevent these social problems. In addition to a proposal to develop new programs to train local law enforcement officers and to equip them with the best techniques of modern science, he also proposed that there be new research efforts to improve our understanding of the causes of and means of preventing delinquency. In relation to the latter he stated that he would soon assemble a group of outstanding experts who would be charged with the responsibility of finding answers to the problems of crime and delinquency.

Research efforts to identify the causes of delinquency have been more successful than efforts to prevent the emergence of delinquent behavior or to provide effective therapy once a pattern of delinquent behavior has developed. While delinquency is not a single homogenous pattern of behavior and is strongly dependent for definition on the vicissitudes of local laws and local law enforcement, there is still substantial agreement in the definition of the behavior pattern as aggressive, norm violating, and demonstrating lack of superego control. There is also substantial agreement that a large share of delinquents are products of predisposing situational factors in the neighborhood and home. This is to say that the

primary causation is often not a psychological discrder or neurosis. Kvaraceus and Miller (1959) estimate that less than twenty percent of adjudicated delinquents suffer from neurotic disorders. The balance of eighty percent or more have adopted aggressive delinquent behavior patterns as a more or less adaptive way of responding to the neighborhood and particularly to family factors.

Becker (1964) summarizes the research on familial factors in the lives of delinquents in The Review of Child Development Research. He suggests that parents of delinquents have been found in numerous studies to have poor affectional relationships with their children and to use poor disciplinary techniques. In particular, he mentions the work of the Gluecks (1950), McCord and others (1959) and Bandura and Walters (1959) who have shown that mothers of delinquents exert little control over their children, impose few restrictions, and do not expect obedience. They have also shown that fathers of delinquents are apt to be lax or overstrict to the point of being brutal.

Utilizing evidence from the entire field of research on delinquency and from their own research on delinquency and its causes, Sheldon and Eleanor Glueck have devoted two professional lifetimes of effort to the development of systems for predicting crime, delinquency, recidivism, and other related conditions. Their research has focused on a multitude of psychological, physiological, and social factors which might be predictive of crime and delinquency. In a preface to the volume Predicting Delinquency and Crime (1959) Chief Justice Earl Warren described the work of the Gluecks as pioneering and forward-looking for people of open minds. Because of the deterministic assertions of the Gluecks in their claims for the predictive efficiency of scales which they have developed, they have

generated both enthusiasm and protest from professionals concerned with this problem.

The Glueck Social Prediction Table for the early identification of potential juvenile delinquents (1959, p.28) includes five factors which must be assessed either through direct contact with a family or through examination of the records of a social agency. These factors are the discipline of the child by the father, the supervision by the mother, the affection of the father and the mother for the child, and the cohesiveness of the family. Using weighted rating categories derived from research by the Gluecks on delinquent and normal children, a score is derived for each factor and then for the total of the five factors. This latter composite score is the delinquency prediction index.

Nine of the major efforts to check the predictive validity of the Glueck factors are reviewed by the Gluecks (1959). Seven of the studies were conducted in the United States, one in Japan, and one in France. While they are exceedingly cautious in their appraisal, the Gluecks conclude that all of the studies are "blowing in the right direction" (1959, p. 132).

One of the most recently reported studies is that of the New York City Youth Board (1963). Results of this study indicate that of 27 boys who were predicted at age 6 to become delinquent, 23, ten years later, were serious or persistent delinquent offenders (85.1 percent accuracy). Of 193 cases predicted non-delinquent, 186 were non-delinquent ten years later (96.4 percent accuracy). Similar predictive efficiency has been reported recently from another study in which the Social Prediction Table was applied to 179 children in Washington, D. C. in the Maximum Benefits Project (Craig and Glick, 1963, p. 260).

In the volume, Delinquents in the Making (1952) the Gluecks pointed

out that 9 out of 10 delinquents had persistently misbehaved in school at an early age while only 2 out of 10 non-delinquents had so misbehaved. Among traits of the delinquents, the Gluecks found lack of interest in school work, inattentiveness, disobedience, disorderliness in class, cheating, defiance, scholastic retardation, lower intelligence, and many other similar traits. Correlations between teacher ratings of such classroom behavior problems and the later emergence of delinquency led Kvaraceus (1961) to suggest that teachers ratings can contribute much in a process of early identification of future delinquents. Kvaraceus' KD Proneness Check List is such an effort to make this process of early identification explicit.

Procedure

In Classroom Behavior: Background Factors and Psycho-Social Correlates (1964) the present authors reported their efforts to assess psycho-social variables observed in children who displayed socially approved or disapproved behavior in the classroom. Public school teachers at the third, sixth, and ninth grade levels throughout an entire county in the state of Wisconsin nominated the boy and the girl who were displaying the most socially disapproved behavior and the boy and the girl who were displaying the most approved behavior. The teachers were also called upon to check on a list of 18 negative behavior traits those which characterized each child. A total of 568 children were nominated as exhibiting disapproved behavior and 982 as exhibiting approved behavior. These 1550 children were classified into subgroups by behavior as approved or disapproved, sex, grade level (3, 6, or 9), and home location as urban or rural. Sixteen children were drawn randomly from each of the 24 subgroups for a total sample of 384 children.

These 384 children were then studied intensively with particular focus on their delinquency proneness and psychological adjustment. Each child was interviewed and tested by a trained social worker who also interviewed the parents. Questionnaires were used as interview instruments with the child and both parents. The interviewer also administered a sentence completion form, a story completion test called Situation Exercises, and the KD Proneness Scale. Utilizing information from all aspects of his contact with the child and the family, the interviewer evaluated the family according to the following Glueck factors:

Prediction Factor	Prediction Weight
Discipline by Father	
Firm but kindly	9.3
Lax	59.8
Overstrict or Erratic	72.5
Supervision by Mother	
Suitable	9.9
Fair	57.5
Unsuitable	83.2
Affection of Father for Child	
Warm or Overprotective	33.8
Indifferent or Hostile	75.9
Affection of Mother for Child	
Warm or Overprotective	43.1
Indifferent or Hostile	86.2
Cohesiveness of Family	
Marked	20.6
Some	61.3
None	96.9

The sum of the five scores for a particular child constituted his delinquency prediction index. This score and its components were analyzed

in relation to the four factors of classroom behavior, sex, grade, and home location. It was found that as a group, the children who were nominated by classroom teachers as displaying socially disapproved behavior in school were much more delinquency prone, as shown by the Glueck scores, than their approved counterparts. They were also characterized by less satisfactory mean performance scores on the KD Proneness Scale, the sentence completion and the Situation Exercises adjustment scores, and numerous items of the interview questionnaires.

In a further effort to analyze results of the study utilizing the Glueck score as an independent variable, a different sample of 96 children was drawn from the pool of 384 children previously studied. This new sample was drawn by first identifying the high and low scoring children on the Glueck scales. A total of 48 subgroups identified by high or low Glueck score, approved or disapproved behavior, sex, grade level, and home location were identified. High Glueck scores were at the level of 220.0 or above and low scores at 116.7, the lowest possible score. (High Glueck scores are indicative of delinquency proneness.) Two children were drawn randomly from each subgroup with the limitation that in several instances there were only two available. Thus, a total of 96 children was selected for study. The factor of home location as urban or rural was equalized in the sample but was then disregarded in subsequent analyses. Consequently, four factors --- Glueck score level, behavior, grade, and sex --- were analyzed. However, it should be pointed out that the principal interest was in the interaction of the Glueck score level and behavior status. This analysis made it possible to assess differences among the following groups:

N=24 High Glueck Score Approved in School HGA	N=24 High Glueck Score Disapproved in School HGD	N=48 High Glueck Score HG
N=24 Low Glueck Score Approved in School LGA	N=24 Low Glueck Score Disapproved in School LGD	N=48 Low Glueck Score LG

In particular, these comparisons made possible the exploration of factors which might explain the false positive and false negative identifications according to Glueck factors, i.e., approved behavior in children who would be expected to manifest disapproved behavior and disapproved behavior in those who would be expected to conduct themselves in an approved fashion.

The following scores were taken from available records on this group of 96 children:

1. Scores on each of the five Glueck Social Factors separately as described earlier, plus the score on an additional factor not used in deriving the delinquency prediction index, Discipline of Child by Mother. This latter factor was rated in the same way as Discipline by the Father. In this reanalysis, the rating categories were changed for four factors as follows:

Discipline of Child by Father

A. Firm but kindly
B. Lax
C. Overstrict
D. Erratic

Affection of Mother for Child

A. Warm
B. Indifferent
C. Hostile

Cohesiveness of Family

A. Marked
B. Some or none

Discipline of Child by Mother

A. Firm but kindly
B. Lax
C. Overstrict
D. Erratic or no answer

2. Ratings on six additional family interaction variables by the social worker-interviewer (called Interviewer Ratings hereafter).
3. Scores on the Kvaraceus Delinquency Proneness Scale for total, six areas, and 15 items.
4. Score for total number of negative behavior traits checked by the teacher and subscores for total of aggressive and non-aggressive traits.
5. Score on the sentence completion form.
6. Five scores from the Situation Exercises.
7. A total of 23 items from the structured interview with the child.
8. Twelve items from the structured interview with the father.
9. Twelve items from the structured interview with the mother.

The items from the KD Scale and from the questionnaires for the mother,

father, and child selected for this analysis were those which the supervisor of the social worker-interviewers believed to be most directly associated with the Glueck score level. The supervisor had examined all 384 cases carefully after they were turned in by the social worker-interviewers; and it was this examination and further study of the material which led to her choices.

A uniform four-factor (Glueck score level, behavior, sex, and grade) analysis of variance design was used for the following 16 variables:

1. The KD total score and 6 area scores.
2. The trait total and subtotals for aggressive and nonaggressive traits.
3. The sentence completion score.
4. Five scores from the Situation Exercises.

All of the other data was essentially non-parametric and was analyzed by counting frequencies of the response levels and computing chi-square for the following dichotomous groups:

(1) High Glueck scorers (HG) versus Low Glueck scorers (LG).

(2) Approved (A) versus Disapproved (D) Behavior.

(3) High Glueck scorers with approved behavior (HGA) versus Low Glueck scorers with disapproved behavior (LGD).

(4) High Glueck scorers with disapproved behavior (HGD) versus Low Glueck scorers with approved behavior (LGA).

(5) High Glueck scorers with approved behavior (HGA) versus High Glueck scorers with disapproved behavior (HGD).

(6) Low Glueck scorers with approved behavior (LGA) versus Low Glueck scorers with disapproved behavior (LGD).

Results

Of the 16 scores for which the four-factor analysis of variance design was used, only four produced results which related to the factor of Glueck score level or the interaction of Glueck score level with behavior, sex, or grade. The first of these was the score for area four items of the Kvaraceus Delinquency Proneness Scale. All of these items relate to occupations, vocational choices, and future decisions. The means, standard deviations, and F ratios for the Glueck and behavior factors and for the interaction of Glueck score level by sex are given in Table 1.1. The F ratio for the Glueck score by sex interaction, 5.32 (1 and 72 d.f.) is significant at the .05 level of confidence. The mean for males who were high Glueck scorers, 20.00, is greater than the means for high females, 18.00, low females, 18.42, and low males, 18.83. The higher score is indicative of greater delinquency proneness.

The additional three scores for which the analyses of variance produced significant results were all related to the Situation Exercises. These results are reported in Tables 1.2, 1.3, and 1.4 for Situations 3 and 4 and for total score. Situation three described a social situation in which a child makes a social overture and is rebuffed while situation four describes a conflict between a child and parent concerning a clothing purchase. The response directions called for the child to list all the things which a child could do or say in the situation. Responses were scored as adaptive, indeterminate, or maladaptive with score values of 1, 2, or 3 respectively. The results for Situation 3 revealed an F ratio for Glueck score level of 3.93 (1 and 72 d.f.) which is nearly significant at the .05 level (F equals 3.98 for 1 and 72 d.f. with $p < .05$). The mean for high Glueck scorers

was 1.90 and for low Glueck scorers, 1.68.

The results for Situation four appear in Table 1.3. The F ratio for Glueck score level, 14.87 (1 and 72 d.f.) is significant at the .01 level of confidence. Again, high Glueck scorers had a higher mean than low Glueck scorers, 2.00 and 1.57 respectively, indicating that the responses of high Glueck scorers were less adaptive.

The results for the total score on four Situation Exercises are given in Table 1.4. The F ratio for Glueck score level, 4.91 (1 and 72 d.f.) is significant at the .05 level of confidence. Again, the mean for high Glueck scorers (less adaptive) exceeds the mean for low Glueck scorers, 7.39 and 6.69, respectively.

All of the subsequent discussion of results will use the abbreviations HG, LG, A, D, HGD, HGA, LGD, and LGA to refer to the criterion groups of children who exhibited disapproved or approved behavior in school and had high or low Glueck scores.

The results of the analyses for the Glueck factors taken separately are given in Tables 1.5 to 1.10. All of the chi-squares for the comparisons of HG versus LG, HGA versus LGD, and HGD versus LGA were significant at the .01 level for all the factors. None of the chi-squares for HGA versus HGD and for LGA versus LGD were significant. LG, as opposed to HG, whether exhibiting approved or disapproved behavior in school are always or nearly always rated as having fathers who are firm (Table 1.5), mothers who supervise suitably (Table 1.6), mothers and fathers who are warm (Tables 1.7 and 1.8), cohesive families (Table 1.9), and mothers who display firm but kindly discipline (Table 1.10). HG, as opposed to LG, have fathers who are lax, overstrict or erratic (Table 1.5); mothers whose supervision is fair or unsuitable (Table 1.6); mothers and fathers who are indifferent or

hostile to the child (Tables 1.7 and 1.8); families which are less cohesive (Table 1.9); and mothers who are lax, overstrict, or erratic (Table 1.10) in their disciplinary efforts. It should be noted that the differences in frequencies of ratings are all large and based on chi-squares which range from 16.00 to 81.23.

Analyses of the six additional ratings of family interaction variables produced significant results for five of the six ratings. These results are reported in Tables 1.11 to 1.15. Again, the significant results are limited to the first three Glueck comparisons - HG versus LG; HGA versus LGD; and HGD versus LGA. No significant results were found for HGA versus HGD and for LGA versus LGD. In general, HG, as opposed to LG, came from homes where the mother dominates or is subservient (Table 1.11), the parents only occasionally talk over problems regarding their child (Table 1.12) (Table 1.12), the parents are likely to have mixed feelings about or disapprove of the child (Tables 1.13 and 1.14), and the child feels tolerated by the parents (Table 1.15). Again, it should be noted that all of the 15 chi-square values were significant at the .01 level and ranged from 12.00 to 53.01.

Of the 15 KD items which were analyzed, seven produced statistically significant results. These results are reported in Tables 1.16 to 1.21. LGA are most inclined to do nothing if called a dirty name (Table 1.16) while one-third HGD would fight or talk back. LG less frequently blame others when they get into serious trouble than do HG (Table 1.17). HGD report that teachers do a <u>little</u> to help the child while LGA often report that teachers do all they can to help the child (Table 1.18). For the question concerning the child's worrying about his family, HGA worry some or not at all while many LGD are inclined to worry (Table 1.19). It is

noteworthy that HGA and HGD show about the same pattern of responses while LGD, like the HGD, report worrying only some or not at all. For the item dealing with report cards, HGD get fair marks while LGA get good marks (Table 1.20). Approved children, whether high or low Glueck scorers, get more good or honor marks than the disapproved. Finally, LG, and especially LGA, see school rules as being based on good reasons while HG, and especially HGD, say the rules have good reasons behind them almost always or only some of the time (Table 1.21).

Of the 23 items from the child interview questionnaire, significant results were found for 5 items. These results are reported in Tables 1.22 to 1.26. For a question in which the child was asked to report what his father liked least about him (Table 1.22) HGA were likely to offer disobedience, personality traits, or to offer some other characteristic. LGD were more likely to pick such things as poor school performance, disobedience, neglected duties, or aggressiveness. When asked to tell things about grownups (Table 1.23), LGA offered chiefly positive ideas while HGD often offered negative, ambivalent, or neutral ideas. For a question which asked if the child's parents behaved as they wanted him to behave (Table 1.24), LGD reported always while one-third of the HGA said the parents did sometimes or were inconsistent.

To a question about memberships (Table 1.25), LG tend to belong to several groups while HG tend to join no activities. The HGA were noticeable for not joining groups while the HGD more often reported belonging to several groups. Finally, when asked about their television viewing time (Table 1.26), HGD watched 4 or 5 hours per day while LGA watched 1 or 2 hours.

Seven of the interview questions addressed to the mother produced

significant results. They are reported in Tables 1.27 to 1.33. The first of these questions dealt with the education of the mother (Table 1.27). Mothers of LGA had more frequently completed high school as compared with the greater number of mothers of LGD who had gone to but had not completed high school. To the question concerning spare time activities (Table 1.28), mothers of HG frequently have activities away from the family while mothers of LG more frequently engage in family-connected activities. HGA mothers infrequently engaged in activities with the family and LGD mothers centered much of their activities around the family. With regard to general family aims (Table 1.29) mothers of LG emphasized religious aims while mothers of HG more frequently than LG emphasized personality development or satisfaction of material needs. Mothers of LGD were particularly strong in emphasizing religious aims while mothers of HGA emphasized personality development.

When asked when it is all right to break a rule in school (Table 1.30) mothers of HGD almost unanimously said never while more mothers of LGA said it was all right in emergencies or in other contingencies. A closely related question asked what she disapproved of in her child's school behavior (Table 1.31). Mothers of LGA almost unanimously reported no problems while mothers of HGD focused on problems of fighting, disobedience, achievement, or interest. Mothers of LGD also focused on the latter problems. Another related question was concerned with the problems the mother faced when disciplining her child (Table 1.32). Mothers of HG more frequently reported the problem of controlling their temper while mothers of LG most frequently reported no problem. Still another closely related question asked what the mother did when her child refused to obey (Table 1.33). Mothers of LG reasoned or used deprivation of privileges while mothers of HG more often used physical punishment or something other than a direct act in

relation to the disobedience. Mothers of LGD and HGD used reasoning or deprivation of privileges but mothers of HGA rarely did.

Six of the interview questions addressed to the father produced significant results. The first of these was concerned with the father's education (Table 1.34). Many fathers of HGA had only one to eight years of education while a majority of fathers of LGD had completed high school. Educational difference was particularly strong for HGD versus LGA. Most fathers of LGA had completed high school or some college while a majority of fathers of HGD had not completed high school. Paralleling a question to the mother, fathers were asked what they did with their spare time (Table 1.35). Fathers of LG most often reported mixed activity with the family while fathers of HG most often reported individual activity. This difference was particularly strong for fathers of HGA as opposed to LGD.

The next question dealt with the father's general aims in bringing up his children (Table 1.36). Fathers of LGD stressed religious and moral aims while fathers of HGA stressed physical and material needs. In response to a question concerning the most pleasant thing about having children (Table 1.37), fathers of LGA stressed the pleasure of witnessing growth, development, and achievement while fathers of LGD the pleasure of finding purpose in life, companionship, love, and appreciation. To a question concerning what the child did in school of which the father disapproved (Table 1.38), fathers of LGD mentioned fighting more often than those of the LGA. Fathers of LGA predominantly reported no problem. Problems in dealing with the child when he misbehaves (Table 1.39) were reported mainly to be absent by fathers of LGA while fathers of HGD often reported the difficulty of controlling temper or other difficulties.

Of the 39 scores which produced significant differences between groups,

21 produced strongest differences between the high Glueck scorers (delinquency prone) and the low Glueck scorers. This is to say that the chi-square was greatest for the HG versus LG comparison among the dichotomous pairs of groups. While other chi-squares in the group of six might be significant, the differentiation between groups was strongest for HG versus LG. The following were the scores which discriminated most powerfully between HG and LG:

1. KD Area 4 (Occupation and Future)
   (However, this variable interacted with sex. HG males scored high in delinquency proneness on this variable.)
2. Situation Exercises III, IV, and Total Adjustment Score.
3. The five Glueck factors plus the additional item for discipline by mother.
4. Five Interviewer Ratings
5. The two KD Proneness Scale items (Tables 1.17 and 1.19) which dealt with worrying and being in trouble.
6. A child interview question concerning the parents' behavior (Table 1.24)
7. Three mother interview questions (Tables 1.30, 1.32, and 1.33) which dealt with children's breaking rules and discipline problems.

For seven other items the discrimination was most powerful for groups defined by the addition of high Glueck score with disapproved behavior in school versus low Glueck score and approved behavior. These would be groups for which the delinquency prediction is supported by school behavior. The items for which this additive discrimination effect was found to produce

the highest chi-square were the following:

1. Three KD Proneness Scale items (Tables 1.16, 1.18, and 1.21) which dealt with the problems of being called a dirty name, getting help from teachers in school, and the bases for school rules.
2. Two child interview questions (Tables 1.23 and 1.26) which asked for descriptions of grownups and a report of TV viewing habits.
3. Two father interview questions (Tables 1.34 and 1.39) which asked the amount of the father's education and his reactions to discipline problems.

For five items the chi-squares were greatest for HGA versus LGD comparisons. These were the groups in which the classroom behavior was not consistent with the delinquency prediction. The following are the items which discriminated most powerfully between these groups:

1. A child interview question (Table 1.25) dealing with club or group memberships. HGA belonged to none or one while LGD belonged to several.
2. A mother interview question (Table 1.28) which asked about her spare time activities. HGA mothers reported no spare time and reported never spending spare time with the family while LGD often spent it with the family and reported no spare time.
3. A mother interview question (Table 1.29) concerned with her general aims for the child. HGA mothers emphasized personality development, obedience, and control while LGD mothers stressed moral and religious aims.
4. A father interview question (Table 1.35) which asked about his spare time. HGA fathers favored individual use of spare time while LGD fathers favored spending time with the family and individually.

5. A father interview question (Table 1.36) concerned with his general aims for the child. HGA fathers emphasized physical and material needs while LGD fathers emphasized moral and religious aims.

Finally, a group of four items were found to discriminate chiefly within the LG group. They were the following:

1. An item which asked the child what he thought his father liked least about him (Table 1.22). LGD reported disobedience, aggression, fighting, and back talk. LGA often said they did not know or gave some other answer.
2. An item dealing with the mother's education (Table 1.27) LGA mothers most often had completed high school while many LGD mothers had entered but not completed high school.
3. A father interview item (Table 1.37) which asked what was the most pleasant thing about having children. LGA fathers often said that it was witnessing growth, development, and achievement while LGD fathers reported that it gives purpose, companionship, or completes a home.
4. A father interview item (Table 1.38) which asked what the child did wrong in school. LGA fathers most often said there was no problem while LGD fathers reported poor achievement, fighting, truancy, tardiness, or lack of interest.

Discussion and Summary

The results of this analysis indicate that there are many differences in interview responses, in responses to a semi-projective instrument, in responses to KD items in the area of occupations and future orientation

between high and low scorers on the Glueck delinquency prediction index, and between groups further differentiated on the basis of approved and disapproved classroom behavior. When this factor of classroom behavior is utilized in combination with the Glueck factors, a number of differentiators can be specified.

While the differentiations were seemingly most numerous for the high versus low scorers on the Glueck scale, it should be noted that the independent variable of Glueck score level was based on a composite of five of these differentiators (Tables 1.5 to 1.9) and that six additional ratings which were most powerful in differentiating HG versus LG were closely related ratings of family interaction (Tables 1.10 to 1.15). Thus, in truth it was the six additional KD and interview items, the KD area scores for occupations and future, and the Situation Exercises which differentiated these groups. The latter items would be more or less independent of the family interaction rating set.

While by no means indicative of gross maladjustment, the responses of the delinquency prone youngsters to the semi-projective test, Situation Exercises, were less adaptive. This would seem to contradict the evidence cited in the introduction (Kvaraceus and Miller, 1959) concerning the absence of psychological disorders in the delinquent. Of course, the youngsters studied in this research were not delinquents, they were delinquency prone according to the Glueck scales. Furthermore, the maladaptive responses of the delinquency prone group probably fell far short of the neurotic problem level.

The present research confirms the earlier findings of the present authors that delinquency proneness and classroom behavior are closely related conditions. It also suggests that the two may be used in combination

to produce some unique discriminations. When added together to produce a sample of children who are exhibiting disapproved classroom behavior and who are delinquency prone, a set of characteristics can be assembled to describe this group and possibly to suggest causal elements. Seemingly, the child in this group has developed less adequate ways of responding to affronts from peers, to teachers, and school rules. He sees adults in a more neutral or negative, not a positive way. He spends too much time watching TV. His father often has only one to eight years of school, and he often reports difficulty in controlling his temper.

The other way of combining delinquency proneness with classroom behavior was to focus on the delinquency prone child who was exhibiting socially approved classroom behavior. Here there was particular interest in possible compensating elements which enabled the delinquency prone youngster to produce good classroom behavior. The composite picture shows him to be a child who joins only one or no clubs or groups. His mother spends no time with the family. Since the rating of delinquency proneness was based chiefly on bad parental behavior, this is obviously a desirable condition for the mother not to spend time with the child or family. The mother was also inclined to stress personality development, obedience and control as general aims in raising her child. The fathers of these children also reported spending their spare time apart from the family. This, again, is apparently a happy circumstance since the father's behavior in relation to the child was rated poorly in the delinquency prediction factors. Finally, the father emphasized supplying physical and material needs as a general aim for his child. If he truly does this for his child, the child is at least spared this one set of frustrations which could otherwise motivate bad school behavior.

It was noteworthy that mothers and fathers of children who were very low in delinquency proneness but who were displaying bad classroom behavior often stressed religion and morals as their chief aims for the child. Cause and effect are, of course, intertwined here. One hesitates to suggest that an emphasis on religion and morals in an otherwise good home should produce bad behavior in the child. The more plausible explanation may be that an unusually strong or over-emphasis of morals and religion may generate parent-child conflicts which erupt in bad classroom behavior.

Ultimately there is the practical interest in adjudicated delinquency. Plans for further longitudinal study of the children described in this paper, of the parent sample of 384 children, and of a larger sample of 1550 who were all the original nominees have been formulated.

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Table 1.1

Mean Area 4 (Occupation and Future) Scores of the KD Proneness Scale for 96 Students Divided According to Glueck Score Level, Approved-Disapproved Behavioral Status, Grade, and Sex

Factor	Level	Means	Standard Deviations	N	F
Glueck Score	High	19.00	2.14	48	
	Low	18.62	1.83	48	
Behavior	Disapproved	18.96	2.35	48	
	Approved	18.67	1.56	48	
Sex	Male	19.42	2.24	48	12.40 *
	Female	18.21	1.50	48	
Grade	3	19.47	1.67	32	
	6	19.25	2.14	32	10.30 *
	9	17.72	1.71	32	
Glueck Score by Behavior	High Approved	18.88	1.60	24	
	High Disapp.	19.13	2.61	24	
	Low Approved	18.46	1.53	24	
	Low Disapp.	18.79	2.11	24	
Glueck Score by Sex	High Male	20.00	2.21	24	
	High Female	18.00	1.56	24	5.32 **
	Low Male	18.83	2.26	24	
	Low Female	18.42	1.44	24	
Glueck Score by Grade	High 3	19.44	1.71	16	
	High 6	19.94	2.46	16	
	High 9	17.63	1.50	16	
	Low 3	19.50	1.67	16	
	Low 6	18.56	1.55	16	
	Low 9	17.81	1.94	16	

* Significant at .01 level of confidence
** Significant at .05 level of confidence

Table 1.2

Mean Adaptive Scores for Situation III for 96 Students Divided According to Glueck Score Level, Approved-Disapproved Behavioral Status, Grade, and Sex

Factor	Level	Means	Standard Deviations	N	F
Glueck Score	High	1.90	0.56	48	3.93
	Low	1.68	0.51	48	
Behavior	Disapproved	1.76	0.57	48	
	Approved	1.82	0.52	48	
Sex	Male	1.82	0.57	48	
	Female	1.77	0.52	48	
Grade	3	1.74	0.47	32	3.21 **
	6	1.98	0.57	32	
	9	1.65	0.55	32	
Glueck Score by Behavior	High Approved	1.94	0.59	24	
	High Disapp.	1.85	0.64	24	
	Low Approved	1.70	0.54	24	
	Low Disapp.	1.67	0.48	24	
Glueck Score by Sex	High Male	1.90	0.63	24	
	High Female	1.90	0.50	24	
	Low Male	1.74	0.51	24	
	Low Female	1.63	0.51	24	
Glueck Score by Grade	High 3	1.77	0.54	16	
	High 6	2.12	0.55	16	
	High 9	1.81	0.57	16	
	Low 3	1.71	0.40	16	
	Low 6	1.84	0.58	16	
	Low 9	1.50	0.50	16	

* Significant at .01 level of confidence

** Significant at .05 level of confidence

Table 1.3

Mean Adaptive Scores for Situation IV for 96 Students Divided According to Glueck Score Level, Approved-Disapproved Behavioral Status, Grade, and Sex

Factor	Level	Means	Standard Deviations	N	F
Glueck Score	High	2.00	0.57	48	14.87 *
	Low	1.57	0.51	48	
Behavior	Disapproved	1.78	0.55	48	
	Approved	1.79	0.60	48	
Sex	Male	1.87	0.60	48	
	Female	1.70	0.54	48	
Grade	3	1.76	0.55	32	
	6	1.90	0.58	32	
	9	1.69	0.59	32	
Glueck Score by Behavior	High Approved	2.01	0.60	24	
	High Disapp.	1.99	0.54	24	
	Low Approved	1.57	0.53	24	
	Low Disapp.	1.57	0.49	24	
Glueck Score by Sex	High Male	2.11	0.61	24	
	High Female	1.89	0.51	24	
	Low Male	1.63	0.50	24	
	Low Female	1.51	0.52	24	
Glueck Score by Grade	High 3	1.94	0.62	16	
	High 6	2.15	0.48	16	
	High 9	1.92	0.60	16	
	Low 3	1.59	0.43	16	
	Low 6	1.66	0.57	16	
	Low 9	1.46	0.51	16	

* Significant at .01 level of confidence
** Significant at .05 level of confidence

Table 1.4

Mean Total Adaptive Scores (Four Situation Exercises) for 96 Students Divided According to Glueck Score Level, Approved-Disapproved Behavioral Status, Grade, and Sex

Factor	Level	Means	Standard Deviations	N	F
Glueck Score	High	7.39	1.57	48	4.91 **
	Low	6.69	1.58	48	
Behavior	Disapproved	7.06	1.63	48	
	Approved	7.02	1.59	48	
Sex	Male	7.29	1.66	48	
	Female	6.79	1.52	48	
Grade	3	7.04	1.23	32	4.47 **
	6	7.61	1.83	32	
	9	6.46	1.52	32	
Glueck Score by Behavior	High Approved	7.25	1.57	24	
	High Disapp.	7.53	1.58	24	
	Low Approved	6.79	1.61	24	
	Low Disapp.	6.59	1.57	24	
Glueck Score by Sex	High Male	7.65	1.67	24	
	High Female	7.13	1.44	24	
	Low Male	6.92	1.60	24	
	Low Female	6.46	1.55	24	
Glueck Score by Grade	High 3	7.20	1.16	16	
	High 6	8.30	1.64	16	
	High 9	6.66	1.47	16	
	Low 3	6.88	1.32	16	
	Low 6	6.93	1.79	16	
	Low 9	6.27	1.59	16	

* Significant at .01 level of confidence

** Significant at .05 level of confidence

Table 1.5

Frequencies of Glueck Factor I Ratings for 96 Students

Divided According to Glueck Score Level and

Approved-Disapproved Behavioral Status

Factor I - Discipline by Father
Options:

1. Firm but kindly
2. Lax
3. Overstrict
4. Erratic

	1	2	3	4	N	Chi-square	df	p
High Glueck	4	21	11	12	48	81.23	3	*
Low Glueck	48	0	0	0	48			
Disapproved	25	9	6	8	48	1.95	3	
Approved	27	12	5	4	48			
High Glueck Approved	3	12	5	4	24	37.33	3	*
Low Glueck Disapproved	24	0	0	0	24			
High Glueck Disapproved	1	9	6	8	24	44.16	3	*
Low Glueck Approved	24	0	0	0	24			
High Glueck Approved	3	12	5	4	24	2.85	3	
High Glueck Disapproved	1	9	6	8	24			
Low Glueck Approved	24	0	0	0	24	0.00	3	
Low Glueck Disapproved	24	0	0	0	24			

* Significant at .01 level of confidence
** Significant at .05 level of confidence

Table 1.6

Frequencies of Glueck Factor II Ratings for 96 Students

Divided According to Glueck Score Level and

Approved-Disapproved Behavioral Status

Factor II - Supervision of child by mother
Options:
1. Suitable
2. Fair
3. Unsuitable

	1	2	3	N	Chi-square	df	p
High Glueck	12	31	5	48	36.00	2	*
Low Glueck	48	0	0	48			
Disapproved	29	17	2	48	0.56	2	
Approved	31	14	3	48			
High Glueck Approved	7	14	3	24	26.32	2	*
Low Glueck Disapproved	24	0	0	24			
High Glueck Disapproved	5	17	2	24	29.42	2	*
Low Glueck Approved	24	0	0	24			
High Glueck Approved	7	14	3	24	0.82	2	
High Glueck Disapproved	5	17	2	24			
Low Glueck Approved	24	0	0	24	0.00	2	
Low Glueck Disapproved	24	0	0	24			

* Significant at .01 level of confidence

** Significant at .05 level of confidence

Table 1.7

Frequencies of Glueck Factor III Ratings for 96 Students Divided According to Glueck Score Level and Approved-Disapproved Behavioral Status

Factor III - Affection of father for child
Options:
1. Warm or overprotective
2. Indifferent or hostile

	1	2	N	Chi-square	df	p
High Glueck	11	37	48	56.99	1	*
Low Glueck	48	0	48			
Disapproved	28	20	48	0.18	1	
Approved	31	17	48			
High Glueck Approved	7	17	24	23.32	1	*
Low Glueck Disapproved	24	0	24			
High Glueck Disapproved	4	20	24	30.94	1	*
Low Glueck Approved	24	0	24			
High Glueck Approved	7	17	24	0.47	1	
High Glueck Disapproved	4	20	24			
Low Glueck Approved	24	0	24	0.00	1	
Low Glueck Disapproved	24	0	24			

* Significant at .01 level of confidence
** Significant at .05 level of confidence

Table 1.8

Frequencies of Glueck Factor IV Ratings for 96 Students Divided According to Glueck Score Level and Approved-Disapproved Behavioral Status

Factor IV - Affection of mother for child
Options:
1. Warm or overprotective
2. Indifferent or hostile

	1	2	N	Chi-square	df	p
High Glueck	25	23	48	27.67	1	*
Low Glueck	48	0	48			
Disapproved	36	12	48	0.00	1	
Approved	37	11	48			
High Glueck Approved	13	11	24	11.79	1	*
Low Glueck Disapproved	24	0	24			
High Glueck Disapproved	12	12	24	13.44	1	*
Low Glueck Approved	24	0	24			
High Glueck Approved	13	11	24	0.00	1	
High Glueck Disapproved	12	12	24			
Low Glueck Approved	24	0	24	0.00	1	
Low Glueck Disapproved	24	0	24			

* Significant at .01 level of confidence

** Significant at .05 level of confidence

Table 1.9

Frequencies of Glueck Factor V Ratings for 96 Students Divided According to Glueck Score Level and Approved-Disapproved Behavioral Status

Factor V - Cohesiveness of family
Options:
1. Marked
2. Some or none

	1	2	N	Chi-square	df	p
High Glueck	5	43	48	74.31	1	*
Low Glueck	48	0	48			
Disapproved	26	22	48	0.00	1	
Approved	27	21	48			
High Glueck Approved	3	21	24	33.86	1	*
Low Glueck Disapproved	24	0	24			
High Glueck Disapproved	2	22	24	37.01	1	*
Low Glueck Approved	24	0	24			
High Glueck Approved	3	21	24	0.00	1	
High Glueck Disapproved	2	22	24			
Low Glueck Approved	24	0	24	0.00	1	
Low Glueck Disapproved	24	0	24			

* Significant at .01 level of confidence
** Significant at .05 level of confidence

Table 1.10

Frequencies of Glueck Factor X Ratings for 96 Students Divided According to Glueck Score Level and Approved-Disapproved Behavioral Status

Factor X - Discipline of Child by Mother
Options:
1. Firm but kindly
2. Lax
3. Overstrict
4. Erratic or no answer

	1	2	3	4	N	Chi-square	df	p
High Glueck	12	19	9	8	48	36.36	3	*
Low Glueck	41	2	2	3	48			
Disapproved	25	13	4	6	48	2.27	3	
Approved	28	8	7	5	48			
High Glueck Approved	8	7	6	3	24	14.90	3	*
Low Glueck Disapproved	21	1	1	1	24			
High Glueck Disapproved	4	12	3	5	24	22.26	3	*
Low Glueck Approved	20	1	1	2	24			
High Glueck Approved	8	7	6	3	24	4.15	3	
High Glueck Disapproved	4	12	3	5	24			
Low Glueck Approved	20	1	1	2	24	0.36	3	
Low Glueck Disapproved	21	1	1	1	24			

* Significant at .01 level of confidence

** Significant at .05 level of confidence

Table 1.11

Frequencies of Interviewer Ratings of Husband and Wife Relationship for 96 Students Divided According to Glueck Score Level and Approved-Disapproved Behavioral Status

Options:
1. Mother dominates
2. Close equalitarian relationship
3. Mother subservient, goes own way, or gave no answer

	1	2	3	N	Chi-square	df	p
High Glueck	21	8	19	48	31.28	2	*
Low Glueck	5	35	8	48			
Disapproved	11	21	16	48	1.57	2	*
Approved	15	22	11	48			
High Glueck Approved	11	6	7	24	15.91	2	*
Low Glueck Disapproved	1	19	4	24			
High Glueck Disapproved	10	2	12	24	17.46	2	*
Low Glueck Approved	4	16	4	24			
High Glueck Approved	11	6	7	24	3.36	2	
High Glueck Disapproved	10	2	12	24			
Low Glueck Approved	4	16	4	24	2.06	2	
Low Glueck Disapproved	1	19	4	24			

* Significant at .01 level of confidence
** Significant at .05 level of confidence

Table 1.12

Frequencies of Interviewer Ratings of Communication of Parents Regarding Child for 96 Students Divided According to Glueck Score Level and Approved-Disapproved Behavioral Status

Options:

1. Mother and father talk things over usually.
2. Sometimes mother and father talk things over.
3. Each acts independently without talking things over or gave no answer

	1	2	3	N	Chi-square	df	p
High Glueck	7	33	8	48	44.23	2	*
Low Glueck	39	5	4	48			
Disapproved	24	19	5	48	0.42	2	
Approved	22	19	7	48			
High Glueck Approved	4	16	4	24	24.25	2	*
Low Glueck Disapproved	21	2	1	24			
High Glueck Disapproved	3	17	4	24	20.66	2	*
Low Glueck Approved	18	3	3	24			
High Glueck Approved	4	16	4	24	0.17	2	
High Glueck Disapproved	3	17	4	24			
Low Glueck Approved	18	3	3	24	1.43	2	
Low Glueck Disapproved	21	2	1	24			

* Significant at .01 level of confidence

** Significant at .05 level of confidence

Table 1.13

Frequencies of Interviewer Ratings of Father's Expression of Approval or Disapproval of Child for 96 Students Divided According to Glueck Score Level and Approved-Disapproved Behavioral Status

Options:

1. Father approves, expresses pleasure
2. Father disapproves, expresses displeasure, has mixed feelings, or gives no answer

	1	2	N	Chi-square	df	p
High Glueck	15	33	48	26.79	1	*
Low Glueck	41	7	48			
Disapproved	27	21	48	0.04	1	
Approved	29	19	48			
High Glueck Approved	10	14	24	11.34-	1	*
Low Glueck Disapproved	22	2	24			
High Glueck Disapproved	5	19	24	14.08	1	*
Low Glueck Approved	19	5	24			
High Glueck Approved	10	14	24	1.55	1	
High Glueck Disapproved	5	19	24			
Low Glueck Approved	19	5	24	0.67	1	
Low Glueck Disapproved	22	2	24			

* Significant at .01 level of confidence

** Significant at .05 level of confidence

Table 1.14

Frequencies of Interviewer Ratings of Mother's Expression of Approval or Disapproval of Child for 96 Students Divided According to Glueck Score Leval and Approved-Disapproved Behavioral Status

Options:
1. Mother approves, expresses pleasure
2. Mother disapproves, expresses displeasure, has mixed feelings, or gives no answer

	1	2	N	Chi-square	df	p
High Glueck	22	26	48	26.67	1	*
Low Glueck	46	2	48			
Disapproved	35	13	48	0.05	1	
Approved	33	15	48			
High Glueck Approved	11	13	24	15.19	1	*
Low Glueck Disapproved	24	0	24			
High Glueck Disapproved	11	13	24	9.70	1	*
Low Glueck Approved	22	2	24			
High Glueck Approved	11	13	24	0.00	1	
High Glueck Disapproved	11	13	24			
Low Glueck Approved	22	2	24	0.52	1	
Low Glueck Disapproved	24	0	24			

* Significant at .01 level of confidence

** Significant at .05 level of confidence

Table 1.15

Frequencies of Interviewer Ratings of Relation of Child and Parent for 96 Students Divided According to Glueck Score Level and Approved-Disapproved Behavioral Status

Options:
1. Child feels close to parents
2. Child feels unsure or tolerated by parents
3. Child feels rejected, threatened

	1	2	3	N	Chi-square	df	p
High Glueck	11	29	8	48	53.01	2	*
Low Glueck	46	2	0	48			
Disapproved	28	16	4	48	0.05	2	
Approved	29	15	4	48			
High Glueck Approved	5	15	4	24	24.64	2	*
Low Glueck Disapproved	22	2	0	24			
High Glueck Disapproved	6	14	4	24	28.80	2	*
Low Glueck Approved	24	0	0	24			
High Glueck Approved	5	15	4	24	0.12	2	
High Glueck Disapproved	6	14	4	24			
Low Glueck Approved	24	0	0	24	0.74	2	
Low Glueck Disapproved	22	2	0	24			

* Significant at .01 level of confidence

** Significant at .05 level of confidence

Table 1.16

Responses to KD Proneness Scale Item 5 (Item 4-JRTJFF) for 96 Students Divided According to Glueck Score Level and Approved-Disapproved Behavioral Status

KD Item 5 - If a person called me a dirty name, I would.....
Response Options:

1. fight the person
2. tell him where to get off
3. say and do nothing
4. laugh it off

	1	2	3	4	N	Chi-square	df	p
High Glueck	4	9	23	12	48	2.90	3	
Low Glueck	3	5	31	9	48			
Disapproved	6	8	22	12	48	6.14	3	
Approved	1	6	32	9	48			
High Glueck Approved	1	4	14	5	24	1.18	3	
Low Glueck Disapproved	3	3	13	5	24			
High Glueck Disapproved	3	5	9	7	24	8.11	3	**
Low Glueck Approved	0	2	18	4	24			
High Glueck Approved	1	4	14	5	24	2.53	3	
High Glueck Disapproved	3	5	9	7	24			
Low Glueck Approved	0	2	18	4	24	4.12	3	
Low Glueck Disapproved	3	3	13	5	24			

* Significant at .01 level of confidence
** Significant at .05 level of confidence

Table 1.17

Responses to KD Proneness Scale Item 30 (Item 27-JRTJFF) for 96 Students Divided According to Glueck Score Level and Approved-Disapproved Behavioral Status

KD Item 30 - Whenever I get into serious trouble, other people are to blame...
Response Options:
1. always, almost always, or some of the time
2. seldom or never

	1	2	N	Chi-square	df	p
High Glueck	35	13	48	4.40	1	**
Low Glueck	24	24	48			
Disapproved	29	19	48	0.00	1	
Approved	30	18	48			
High Glueck Approved	16	8	24	1.95	1	
Low Glueck Disapproved	10	14	24			
High Glueck Disapproved	19	5	24	1.55	1	
Low Glueck Approved	14	10	24			
High Glueck Approved	16	8	24	.42	1	
High Glueck Disapproved	19	5	24			
Low Glueck Approved	14	10	24	.75	1	
Low Glueck Disapproved	10	14	24			

* Significant at .01 level of confidence
** Significant at .05 level of confidence

Table 1.18

Responses to KD Proneness Scale Item 46 (Item 43-JRTJFF) for 96 Students Divided According to Glueck Score Level and Approved-Disapproved Behavioral Status

KD Item 46 - In the schools, teachers can usually be depended upon to do ....
Response Options:
1. nothing or a little to help me
2. much to help me
3. all they can to help me

	1	2	3	N	Chi-square	df	p
High Glueck	16	8	24	48	2.85	2	
Low Glueck	9	8	31	48			
Disapproved	17	8	23	48	4.71	2	
Approved	8	8	32	48			
High Glueck Approved	5	4	15	24	0.13	2	
Low Glueck Disapproved	6	4	14	24			
High Glueck Disapproved	11	4	9	24	7.03	2	**
Low Glueck Approved	3	4	17	24			
High Glueck Approved	5	4	15	24	3.75	2	
High Glueck Disapproved	11	4	9	24			
Low Glueck Approved	3	4	17	24	1.29	2	
Low Glueck Disapproved	6	4	14	24			

* Significant at .01 level of confidence
** Significant at .05 level of confidence

Table 1.19

Responses to KD Proneness Scale Item 49 (Item 46-JRTJFF) for 96 Students Divided According to Glueck Score Level and Approved-Disapproved Behavioral Sta us

KD Item 49 - During the past month, I have worried about my family.....
Response Options:

1. all the time
2. most of the time
3. some of the time
4. not at all

	1	2	3	4	N	Chi-square	df	p
High Glueck	3	5	25	15	48	13.16	3	*
Low Glueck	9	14	21	4	48			
Disapproved	9	9	19	11	48	5.32	3	
Approved	3	10	27	8	48			
High Glueck Approved	1	1	14	8	24	9.60	3	**
Low Glueck Disapprov d	7	5	8	4	24			
High Glueck Disapproved	2	4	11	7	24	9.09	3	**
Low Glueck Approved	2	9	13	0	24			
High Glueck Approved	1	1	14	8	24	2.47	3	
High Glueck Disapproved	2	4	11	7	24			
Low Glueck Approved	2	9	13	0	24	9.11	3	**
Low Glueck Disapproved	7	5	8	4	24			

* Significant at .01 level of confidence
** Significant at .05 level of confidence

Table 1.20

Responses to KD Proneness Scale Item 67 (Item 63-JRTJFF) for 96 Students Divided According to Glueck Score Level and Approved-Disapproved Behavioral Status

KD Item 67 - On my report card I usually get .....
Response Options:

1. all honor marks
2. mostly good marks
3. fair marks
4. some failure marks

	1	2	3	4	N	Chi-square	df	p
High Glueck	5	14	23	6	48	1.83	3	
Low Glueck	6	19	17	6	48			
Disapproved	2	10	27	9	48	17.48	3	*
Approved	9	23	13	3	48			
High Glueck Approved	4	10	8	2	24	6.25	3	
Low Glueck Disapproved	1	6	12	5	24			
High Glueck Disapproved	1	4	15	4	24	14.23	3	*
Low Glueck Approved	5	13	5	1	24			
High Glueck Approved	4	10	8	2	24	8.28	3	**
High Glueck Disapproved	1	4	15	4	24			
Low Glueck Approved	5	13	5	1	24	10.79	3	**
Low Glueck Disapproved	1	6	12	5	24			

* Significant at .01 level of confidence
** Significant at .05 level of confidence

Table 1.21

Responses to KD Proneness Scale Item 69 (Item 65-JRTJFF) for 96 Students Divided According to Glueck Score Level and Approved-Disapproved Behavioral Status

KD Item 69 - School rules and regulations have good reasons behind them .....
Response Options:
1. always
2. almost always
3. some of the time, seldom, or never

	1	2	3	N	Chi-square	df	p
High Glueck	21	15	12	48	7.83	2	**
Low Glueck	32	13	3	48			
Disapproved	22	17	9	48	3.41	2	
Approved	31	11	6	48			
High Glueck Approved	14	5	5	24	1.65	2	
Low Glueck Disapproved	15	7	2	24			
High Glueck Disapproved	7	10	7	24	9.67	2	*
Low Glueck Approved	17	6	1	24			
High Glueck Approved	14	5	5	24	4.33	2	
High Glueck Disapproved	7	10	7	24			
Low Glueck Approved	17	6	1	24	0.53	2	
Low Glueck Disapproved	15	7	2	24			

* Significant at .01 level of confidence
** Significant at .05 level of confidence

Table 1.22

Responses of 96 Students Divided According to Glueck Score Level and Approved-Disapproved Behavioral Status

Child Question 5 - If I asked him to tell me the thing he liked least about you, what do you suppose he'd say?

Response Options:

1. Faulty school or other achievement; duties neglected, resisted or forgotten
2. Disobedience, aggressiveness, talk back, fight
3. Personality traits, bad habits, disposition, physical defect
4. Don't know
5. Other

	1	2	3	4	5	N	Chi-square	df	p
High Glueck	8	10	10	9	11	48	2.84	4	
Low Glueck	9	16	9	5	9	48			
Disapproved	12	16	6	6	8	48	7.93	4	
Approved	5	10	13	8	12	48			
High Glueck Approved	2	6	8	3	5	24	9.62	4	**
Low Glueck Disapproved	6	12	4	0	2	24			
High Glueck Disapproved	6	4	2	6	6	24	2.45	4	
Low Glueck Approved	3	4	5	5	7	24			
High Glueck Approved	2	6	8	3	5	24	7.09	4	
High Glueck Disapproved	6	4	2	6	6	24			
Low Glueck Approved	3	4	5	5	7	24	12.89	4	**
Low Glueck Disapproved	6	12	4	0	2	24			

* Significant at .01 level of confidence

** Significant at .05 level of confidence

Table 1.23

Responses of 96 Students Divided According to Glueck Score Level and Approved-Disapproved Behavioral Status

Child Question 13 - Tell me as many things about grown-ups as you can think of.
Response Options:

1. Positive relationship with adults implied.
2. Ambivalent negative and positive relationship implied.
3. Strongly negative relationship.
4. Neutral non-evaluative relationship or no relationship implied.

	1	2	3	4	N	Chi-square	df	p
High Glueck	18	12	7	11	48	8.88	3	**
Low Glueck	32	5	3	8	48			
Disapproved	20	8	6	14	48	6.72	3	
Approved	30	9	4	5	48			
High Glueck Approved	13	6	2	3	24	3.48	3	
Low Glueck Disapproved	15	2	1	6	24			
High Glueck Disapproved	5	6	5	8	24	12.43	3	*
Low Glueck Approved	17	3	2	2	24			
High Glueck Approved	13	6	2	3	24	7.11	3	
High Glueck Disapproved	5	6	5	8	24			
Low Glueck Approved	17	3	2	2	24	2.66	3	
Low Glueck Disapproved	15	2	1	6	24			

* Significant at .01 level of confidence

** Significant at .05 level of confidence

Table 1.24

Responses of 96 Students Divided According to Glueck Score Level and Approved-Disapproved Behavioral Status

Child Question 16 - Do your parents behave the way they want you to behave?
Response Options:

1. Always do what they expect me to do
2. Sometimes they fall down a bit, are inconsistent, or they fall down most of the time, or no answer

	1	2	N	Chi-square	df	p
High Glueck	28	20	48	7.42	1	*
Low Glueck	41	7	48			
Disapproved	35	13	48	0.00	1	
Approved	34	14	48			
High Glueck Approved	16	8	24	4.92	1	**
Low Glueck Disapproved	23	1	24			
High Glueck Disapproved	12	12	24	2.22	1	
Low Glueck Approved	18	6	24			
High Glueck Approved	16	8	24	0.77	1	
High Glueck Disapproved	12	12	24			
Low Glueck Approved	18	6	24	2.68	1	
Low Glueck Disapproved	23	1	24			

* Significant at .01 level of confidence
** Significant at .05 level of confidence

Table 1.25

Responses of 96 Students Divided According to Glueck Score Level and Approved-Disapproved Behavioral Status

Child Question 26 - What clubs or groups do you belong to?
Response Options:
1. One
2. Several
3. None or no answer

	1	2	3	N	Chi-square	df	p
High Glueck	13	12	23	48	6.91	2	**
Low Glueck	13	23	12	48			
Disapproved	13	22	13	48	4.63	2	
Approved	13	13	22	48			
High Glueck Approved	8	2	14	24	12.70	2	*
Low Glueck Disapproved	8	12	4	24			
High Glueck Disapproved	5	10	9	24	0.11	2	
Low Glueck Approved	5	11	8	24			
High Glueck Approved	8	2	14	24	7.11	2	**
High Glueck Disapproved	5	10	9	24			
Low Glueck Approved	5	11	8	24	2.07	2	
Low Glueck Disapproved	8	12	4	24			

* Significant at .01 level of confidence
** Significant at .05 level of confidence

Table 1.26

Responses of 96 Students Divided According to Glueck Score Level and Approved-Disapproved Behavioral Status

Child Question 42 - How long do you watch it?
Response Options:
1. 1 hour
2. 2 hours
3. 3 hours
4. 4 hours or more

	1	2	3	4	N	Chi-square	df	p
High Glueck	9	13	8	18	48	9.72	3	**
Low Glueck	14	18	11	5	48			
Disapproved	10	10	11	17	48	10.03	3	**
Approved	13	21	8	6	48			
High Glueck Approved	5	11	4	4	24	1.53	3	
Low Glueck Disapproved	6	8	7	3	24			
High Glueck Disapproved	4	2	4	14	24	15.67	3	*
Low Glueck Approved	8	10	4	2	24			
High Glueck Approved	5	11	4	4	24	11.90	3	*
High Glueck Disapproved	4	2	4	14	24			
Low Glueck Approved	8	10	4	2	24	1.53	3	
Low Glueck Disapproved	6	8	7	3	24			

* Significant at .01 level of confidence

** Significant at .05 level of confidence

Table 1.27

Responses of Mothers of 96 Students Divided According to Glueck Score Level and Approved-Disapproved Behavioral Status

Mother Question 1 - What was the highest grade of school you completed?
Response Options:

1. 1-8 years or no answer
2. 9-11 years
3. Completed high school
4. 1-4 years of college

	1	2	3	4	N	Chi-square	df	p
High Glueck	13	8	20	7	48	3.23	3	
Low Glueck	6	10	24	8	48			
Disapproved	7	14	21	6	48	7.56	3	**
Approved	12	4	23	9	48			
High Glueck Approved	7	3	9	5	24	7.66	3	
Low Glueck Disapproved	1	9	10	4	24			
High Glueck Disapproved	6	5	11	2	24	3.78	3	
Low Glueck Approved	5	1	14	4	24			
High Glueck Approved	7	3	9	5	24	2.06	3	
High Glueck Disapproved	6	5	11	2	24			
Low Glueck Approved	5	1	14	4	24	9.73	3	**
Low Glueck Disapproved	1	9	10	4	24			

* Significant at .01 level of confidence

** Significant at .05 level of confidence

Table 1.28

Responses of Mothers of 96 Students Divided According to Glueck Score Level and Approved-Disapproved Behavioral Status

Mother Question 18 - What other things do you do with your spare time?
Response Options:

1. Individual
2. With family
3. Mixed
4. None or no answer

	1	2	3	4	N	Chi-square	df	p
High Glueck	20	2	14	12	48	11.91	3	*
Low Glueck	18	8	20	2	48			
Disapproved	18	0	16	5	48	7.77	3	
Approved	20	1	18	9	48			
High Glueck Approved	8	0	9	7	24	12.93	3	*
Low Glueck Disapproved	6	7	11	0	24			
High Glueck Disapproved	12	2	5	5	24	2.76	3	
Low Glueck Approved	12	1	9	2	24			
High Glueck Approved	8	0	9	7	24	4.28	3	
High Glueck Disapproved	12	2	5	5	24			
Low Glueck Approved	12	1	9	2	24	8.70	3	**
Low Glueck Disapproved	6	7	11	0	24			

* Significant at .01 level of confidence

** Significant at .05 level of confidence

Table 1.29

Responses of Mothers of 96 Students Divided According to Glueck Score Level and Approved-Disapproved Behavioral Status

Mother Question 21 - In bringing up your children, what do you try to do - what are your general aims?

Response Options:
1. Religious and moral goals
2. Good inter-personal relations, human relations
3. Personality traits - obedience, impulse control, happiness
4. To supply physical and material needs; to help child to be a success, or no answer

	1	2	3	4	N	Chi-square	df	p
High Glueck	22	5	13	8	48	9.32	3	**
Low Glueck	36	4	5	3	48			
Disapproved	32	5	5	6	48	4.38	3	
Approved	26	4	13	5	48			
High Glueck Approved	8	2	10	4	24	9.85	3	**
Low Glueck Disapproved	18	2	2	2	24			
High Glueck Disapproved	14	3	3	4	24	2.50	3	
Low Glueck Approved	18	2	3	1	24			
High Glueck Approved	8	2	10	4	24	5.61	3	
High Glueck Disapproved	14	3	3	4	24			
Low Glueck Approved	18	2	3	1	24	0.53	3	
Low Glueck Disapproved	18	2	2	2	24			

* Significant at .01 level of confidence
** Significant at .05 level of confidence

Table 1.30

Responses of Mothers of 96 Students Divided According to Glueck Score Level and Approved-Disapproved Behavioral Status

Mother Question 25 - When is it okay to break a rule around school?
Response Options:
1. Emergency or other contingencies
2. Never

	1	2	N	Chi-square	df	p
High Glueck	4	44	48	5.54	1	**
Low Glueck	14	34	48			
Disapproved	7	41	48	0.62	1	
Approved	11	37	48			
High Glueck Approved	2	22	24	0.67	1	
Low Glueck Disapproved	5	19	24			
High Glueck Disapproved	2	22	24	4.25	1	**
Low Glueck Approved	9	15	24			
High Glueck Approved	2	22	24	0.00	1	
High Glueck Disapproved	2	22	24			
Low Glueck Approved	9	15	24	0.91	1	
Low Glueck Disapproved	5	19	24			

* Significant at .01 level of confidence

** Significant at .05 level of confidence

Table 1.31

Responses of Mothers of 96 Students Divided According to Glueck Score Level and Approved-Disapproved Behavioral Status

Mother Question 26 - What did your child do at school you didn't approve of?
Response Options:
1. Skip, tardy, fighting, authority problem
2. Not doing well, level of interest
3. No problem
4. Don't know, no answer, or other

	1	2	3	4	N	Chi-square	df	p
High Glueck	12	11	12	13	48	10.03	3	**
Low Glueck	15	6	23	4	48			
Disapproved	22	12	7	7	48	26.72	3	*
Approved	5	5	28	10	48			
High Glueck Approved	3	4	8	9	24	11.63	3	*
Low Glueck Disapproved	13	5	3	3	24			
High Glueck Disapproved	9	7	4	4	24	21.42	3	*
Low Glueck Approved	2	1	20	1	24			
High Glueck Approved	3	4	8	9	24	7.08	3	
High Glueck Disapproved	9	7	4	4	24			
Low Glueck Approved	2	1	20	1	24	24.30	3	*
Low Glueck Disapproved	13	5	3	3	24			

* Significant at .01 level of confidence
** Significant at .05 level of confidence

Table 1.32

Responses of Mothers of 96 Students Divided According to Glueck Score Level and Approved-Disapproved Behavioral Status

Mother Question 27 - What are problems of dealing with the child when he has done something parent doesn't approve of?

Response Options:

1. Controlling temper
2. Being fair
3. Other
4. No problem

	1	2	3	4	N	Chi-square	df	p
High Glueck	21	9	9	9	48			
Low Glueck	15	7	4	22	48	8.62	3	**
Disapproved	17	9	6	16	48			
Approved	19	7	7	15	48	0.47	3	
High Glueck Approved	12	4	6	2	24			
Low Glueck Disapproved	8	4	3	9	24	6.25	33	
High Glueck Disapproved	9	5	3	7	24			
Low Glueck Approved	7	3	1	13	24	3.55	3	
High Glueck Approved	12	4	6	2	24			
High Glueck Disapproved	9	5	3	7	24	4.32	3	
Low Glueck Approved	7	3	1	13	24			
Low Glueck Disapproved	8	4	3	9	24	1.94	3	

* Significant at .01 level of confidence

** Significant at .05 level of confidence

Table 1.33

Responses of Mothers of 96 Students Divided According to Glueck Score Level and Approved-Disapproved Behavioral Status

Mother Question 29 - What did you do when your child refused to do what you wanted him to do?

Response Options:

1. Physical punishment
2. Threaten, scold
3. Order
4. Reason or deprive of privileges
5. Other-than-direct, no such problem, other, or no answer

	1	2	3	4	5	N	Chi-square	df	p
High Glueck	10	8	6	13	11	48	12.41	4	**
Low Glueck	4	7	4	29	4	48			
Disapproved	6	5	5	23	9	48	2.94	4	
Approved	8	10	5	19	6	48			
High Glueck Approved	6	7	3	3	5	24	9.77	4	**
Low Glueck Disapproved	2	4	2	13	3	24			
High Glueck Disapproved	4	1	3	10	6	24	6.82	4	
Low Glueck Approved	2	3	2	16	1	24			
High Glueck Approved	6	7	3	3	5	24	8.76	4	
High Glueck Disapproved	4	1	3	10	6	24			
Low Glueck Approved	2	3	2	16	1	24	1.45	4	
Low Glueck Disapproved	2	4	2	13	3	24			

* Significant at .01 level of confidence

** Significant at .05 level of confidence

Table 1.34

Responses of Fathers of 96 Students Divided According to Glueck Score Level and Approved-Disapproved Behavioral Status

Father Question 3 - What was the highest grade of school you completed?
Response Options:

1. 1-8 years or no answer
2. 9-11 years
3. Completed high school
4. 1-4 years college

	1	2	3	4	N	Chi-square	df	p
High Glueck	29	4	11	4	48	8.39	3	**
Low Glueck	16	3	22	7	48			
Disapproved	19	6	18	5	48	5.02	3	
Approved	26	1	15	6	48			
High Glueck Approved	14	0	8	2	24	9.88	3	**
Low Glueck Disapproved	4	2	15	3	24			
High Glueck Disapproved	15	4	3	2	24	15.24	3	*
Low Glueck Approved	4	2	15	3	24			
High Glueck Approved	14	0	8	2	24	6.30	3	
High Glueck Disapproved	15	4	3	2	24			
Low Glueck Approved	12	1	7	4	24	7.38	3	
Low Glueck Disapproved	4	2	15	3	24			

* Significant at .01 level of confidence

** Significant at .05 level of confidence

Table 1.35

Responses of Fathers of 96 Students Divided According to Glueck Score Level and Approved-Disapproved Behavioral Status

Father Question 20 - What other things do you do with your spare time?
Response Options:

1. Individual
2. With family
3. Mixed
4. None or no answer

	1	2	3	4	N	Chi-square	df	p
High Glueck	23	5	6	14	48	21.27	3	*
Low Glueck	9	9	24	6	48			
Disapproved	11	8	19	10	48	5.54	3	
Approved	21	6	11	10	48			
High Glueck Approved	13	2	3	6	24	22.47	3	*
Low Glueck Disapproved	1	5	16	2	24			
High Glueck Disapproved	10	3	3	8	24	3.97	3	
Low Glueck Approved	8	4	8	4	24			
High Glueck Approved	13	2	3	6	24	0.88	3	
High Glueck Disapproved	10	3	3	8	24			
Low Glueck Approved	8	4	8	4	24	8.89	3	**
Low Glueck Disapproved	1	5	16	2	24			

* Significant at .01 level of confidence

** Significant at .05 level of confidence

Table 1.36

Responses of Fathers of 96 Students Divided According to Glueck Score Level and Approved-Disapproved Behavioral Status

Father Question 23 - In bringing up your children, what do you try to do - what are your general aims?

Response Options:
1. Religious and moral goals
2. Good inter-personal relations, human relations
3. Personality traits - obedience, impulse control, happiness
4. To supply physical and material needs; to help child be a success
5. Don't know or no answer

	1	2	3	4	5	N	Chi-square	df	p
High Glueck	9	6	7	16	10	48	8.65	4	
Low Glueck	20	7	8	8	5	48			
Disapproved	17	9	8	8	6	48	6.12	4	
Approved	12	4	7	16	9	48			
High Glueck Approved	3	1	5	10	5	24	14.46	4	*
Low Glueck Disapproved	11	4	6	2	1	24			
High Glueck Disapproved	6	5	2	6	5	24	1.21	4	
Low Glueck Approved	9	3	2	6	4	24			
High Glueck Approved	3	1	5	10	5	24	5.95	4	
High Glueck Disapproved	6	5	2	6	5	24			
Low Glueck Approved	9	3	2	6	4	24	6.14	4	
Low Glueck Disapproved	11	4	6	2	1	24			

* Significant at .01 level of confidence

** Significant at .05 level of confidence

Table 1.37

Responses of Fathers of 96 Students Divided According to Glueck Score Level and Approved-Disapproved Behavioral Status

Father Question 25 - What is the most pleasant thing about having children?
Response Options:
1. Witness their growth, development, achievement
2. Gives purpose to life, completes a home, family life
3. Companionship, fun, excitement
4. Rewarding personal response, love, appreciation
5. Help, possession, security when older, everything in general, nothing specific, other, or no answer

	1	2	3	4	5	N	Chi-square	df	p
High Glueck	12	7	12	5	12	48	2.06	4	
Low Glueck	10	12	11	6	9	48			
Disapproved	7	11	12	7	11	48	4.29	4	
Approved	15	8	11	4	10	48			
High Glueck Approved	6	5	7	2	4	24	5.52	4	
Low Glueck Disapproved	1	9	7	4	3	24			
High Glueck Disapproved	6	2	5	3	8	24	1.40	4	
Low Glueck Approved	9	3	4	2	6	24			
High Glueck Approved	6	5	7	2	4	24	3.15	4	
High Glueck Disapproved	6	2	5	3	8	24			
Low Glueck Approved	9	3	4	2	6	24	11.89	4	**
Low Glueck Disapproved	1	9	7	4	3	24			

* Significant at .01 level of confidence
** Significant at .05 level of confidence

Table 1.38

Responses of Fathers of 96 Students Divided According to Glueck Score Level and Approved-Disapproved Behavioral Status

Father Question 28 - What did child do at school you didn't approve of?
Response Options:

1. Skip, tardy, fighting, authority problem
2. Not doing well, level of interest
3. No problem
4. Don't know, no answer, or other

	1	2	3	4	N	Chi-square	df	p
High Glueck	12	8	14	14	48			
Low Glueck	10	5	24	9	48	4.59	3	
Disapproved	16	7	15	10	48			
Approved	6	6	23	13	48	6.70	3	
High Glueck Approved	5	5	8	6	24			
Low Glueck Disapproved	9	4	9	2	24	3.31	3	
High Glueck Disapproved	7	3	6	8	24			
Low Glueck Approved	1	1	15	7	24	9.42	3	**
High Glueck Approved	5	5	8	6	24			
High Glueck Disapproved	7	3	6	8	24	1.41	3	
Low Glueck Approved	1	1	15	7	24			
Low Glueck Disapproved	9	4	9	2	24	12.48	3	*

* Significant at .01 level of confidence

** Significant at .05 level of confidence

Table 1.39

Responses of Fathers of 96 Students Divided According to Glueck Score Level and Approved-Disapproved Behavioral Status

Father Question 29 - What are problems in dealing with the child when he has done something parent doesn't approve of?

Response Options:

1. Controlling temper
2. Being fair
3. Other
4. No problem
5. No answer

	1	2	3	4	5	N	Chi-square	df	p
High Glueck	14	3	6	18	7	48	6.51	4	
Low Glueck	9	9	3	23	4	48			
Disapproved	15	5	7	16	5	48	7.31	4	
Approved	8	7	2	25	6	48			
High Glueck Approved	5	2	1	13	3	24	2.26	4	
Low Glueck Disapproved	6	4	2	11	1	24			
High Glueck Disapproved	9	1	5	5	4	24	11.36	4	**
Low Glueck Approved	3	5	1	12	3	24			
High Glueck Approved	5	2	1	13	3	24	7.84	4	
High Glueck Disapproved	9	1	5	5	4	24			
Low Glueck Approved	3	5	1	12	3	24	2.49	4	
Low Glueck Disapproved	6	4	2	11	1	24			

* Significant at .01 level of confidence

** Significant at .05 level of confidence

Chapter 2

Intelligence and Achievement

In Unraveling Juvenile Delinquency (1950) the Gluecks reported that poor school performance characterized their sample of 500 delinquents while normal or high achievement characterized a sample of 500 non-delinquents. The two groups were matched on the basis of IQ and other factors. Achievement in basic subjects was lower for the delinquents than the non-delinquents, and the delinquents dropped out of school earlier, repeated more grades, and attended more schools than the non-delinquents.

Powers and Witmer reported in The Prevention of Delinquency (1951) that there was a significant relationship between educational retardation and delinquency. A majority of the most severely delinquent youth were retarded two or three years in school while a majority of the normal youngsters were not retarded or were only one year behind. Similarly, the average IQ for the most severely delinquent group, 87.3, was significantly lower than the average for the normals in this study, 103.0.

Scarpitti (1964) studied sixth graders who were nominated as "good boys" and "bad boys." The "good boys" had been nominated by their teachers as unlikely to experience difficulty with the law; the "bad boys" were nominated as potential delinquents. Four years later, only 4 of the 103 "good boys" had become known to police or courts, while 27 of the 70 "bad boys" were on file for delinquency. As a group, the "bad boys" had a significantly lower intelligence quotient than their "good" counterparts and were at least one year below their grade level in arithmetic and reading achievement.

An exhaustive review of research studies dealing with the relationship between psycho-social adjustment and reading is presented in "Reaching

Delinquents Through Reading," by Roman (1957). Included in this review he reported that in a survey which he conducted at the Manhattan Children's Court, 84 percent of the cases carried by the Treatment Clinic presented a problem of reading retardation in conjunction with personality disorders and anti-social behavior.

Powell and Bergem (1962) reported that nonconforming tenth, eleventh, and twelfth grade boys who had records of disruptive and socially disapproved behavior in an urban high school were achieving at significantly lower levels in reading than conforming boys. They also reported that the conforming boys were earning significantly better grade averages in English, physical education, and for all school subjects combined. Since the groups were matched according to IQ, the differences could not be attributed simply to differences in mental ability.

Kvaraceus (1961) reported that "low morale" youngsters who were serious discipline problems in school or on the playground had lower IQ's and were frequently low in reading ability. He suggested that reading ability may be either cause or effect in relation to "low morale" behavior.

Liddle (1963) reviewed studies of reading achievement and mental ability in relation to delinquency and concluded that the mean IQ of juvenile delinquents is about 90 and that there is substantial reading retardation among delinquents. Liddle suggested that the delinquent's behavior in and out of school probably results in part from the frustrations of low ability and poor achievement in school.

Wattenberg (1963) also suggested that school, as well as the home, may present a baffling array of frustrations for the delinquent (who is also a repeat offender). The group whom he studied had low IQs, poor academic records, and poor relationships with teachers. Wattenberg proposed that

planned successes in school for the pre-delinquent may be used to offset the development of delinquent behavior patterns.

In Juvenile Delinquency in Modern Society (1961) Neumeyer reviewed evidence from many studies of the relation of intelligence to delinquency and crime. He concluded that intelligence cannot be ruled out completely as a significant factor. In a more positive way, he suggested that the role of mental ability is probably crucial in individual cases.

In a much less cautious fashion, Sheldon Glueck concludes a recent discussion of the problem of juvenile delinquency (1964) with the suggestion that the traditional role of the school causes tension, frustration, revolt, and delinquency. Again he emphasizes the dual problems of low mental ability and the downward spiral of failure engendered by lack of capability in basic tool subjects.

In Classroom Behavior: Background Factors and Psycho-Social Correlates (1964) Thurston, Feldhusen and Benning found that the mean IQ of the 192 children who were nominated by their teachers as displaying socially disapproved behavior was significantly lower than the mean IQ of the 192 children who were nominated showing socially approved behavior in school.

From this brief review it seems possible that the following conclusions are warranted concerning children who are aggressive or disruptive in school or who become delinquent, in comparison with youngsters who do not manifest such behavior:

(1) They will have a lower mean IQ.

(2) They will achieve at a lower mean level in basic skill subjects.

(3) Their achievement will be even lower than one would expect on the basis of a lower mean IQ.

The research reported in this chapter is designed to answer questions related to the three conclusions stated above. With reference to youngsters who persistently exhibit socially disapproved, disruptive, and aggressive behavior in the classroom, as compared with those who display socially approved behavior, the following questions will be investigated:

(1) Are there differences in achievement levels in the basic skills of reading and arithmetic?

(2) Is there a difference in mean IQ for the sample studied in this chapter?

(3) Are there differences in reading and arithmetic achievement levels when the IQ factor is equated statistically (covariance)?

Procedure

Achievement and intelligence test data were sought for all of the 384 children studied in Phase I of the Eau Claire County Youth Study (1961-1964). The selection procedures used to obtain the sample were described fully in Classroom Behavior: Background Factors and Psycho-Social Correlates (1964). In brief, 1550 children were nominated by classroom teachers in public and parochial schools in Eau Claire County, Wisconsin, as persistently displaying socially approved or disapproved school behavior. Disapproved behavior was defined as disruptive or aggressive. From the pool of 1550 nominations, a random sample of 384 children was drawn for further study. This sample consisted of equal numbers of children who were displaying approved and disapproved behavior; equal numbers of third, sixth, and ninth graders; equal numbers of boys and girls; and equal numbers of urban and rural children. Thus, a cell defined by all four selection factors, such as approved, urban, third grade, males consisted of 16 youngsters.

A sample of 292 children was drawn randomly from the pool of 338 children for whom complete IQ and achievement data was available in school records. Complete data was not available in the school records for 46, or twelve percent, of the original sample of 384 children. Complete data were available for 104 third graders, 114 sixth graders, and 120 ninth graders. Analyses of variance and covariance procedures which required that there be equal numbers of subjects in each of the cells were used in analyzing these data. To satisfy this requirement a few subjects on whom complete data were available were withdrawn randomly from some cells.

Analyses of variance and covariance were conducted for third and sixth grade data combined. Figure 1 shows the number of subjects in each cell according to grade, behavioral status, and sex. Ninth grade data were not analyzed with that of the other two grades because only half of the ninth grade achievement scores were in grade equivalent form, the form in which all third and sixth grade scores were reported. Achievement scores for sixty-one of the ninth graders were available only as percentile scores. Therefore, the ninth grade data were treated separately. Figure 2 shows the number of ninth graders for whom grade equivalent scores were recorded and Figure 3 shows the number for whom achievement had been recorded as percentile scores.

Figure 1

Third and Sixth Grade Students

	Approved		Disapproved		
	Males	Females	Males	Females	Total
Grade 3	N = 25	N = 25	N = 25	N = 25	100
Grade 6	N = 25	N = 25	N = 25	N = 25	100

Figure 2

Ninth Grade Students With Grade Equivalent Scores

	Approved	Disapproved	Total
Male	N = 12	N = 12	24
Female	N = 12	N = 12	24
	24	24	48

Figure 3

Ninth Grade Students With Percentile Scores

	Approved	Disapproved	Total
Male	N = 11	N = 11	22
Female	N = 11	N = 11	22
	22	22	44

Schools participating in the study had no common achievement test among their testing programs. Thus, the data used in the analyses made in this chapter were derived from several tests and were stated in terms of a variety of norm groups. The tests most frequently used were the California Achievement Tests, the Iowa Tests of Basic Skills, and the Metropolitan Achievement Test.

A grade level discrepancy score in both reading and arithmetic was computed for each child whose test results were given in grade equivalent terms. This discrepancy score was the difference between the expected grade equivalent score (the score expected of the average student at that

grade level) and the child's actual score on the achievement test. The date used as the base for computing the expected score was the month previous to the one in which the achievement test was taken. For example, in the case of a test administered to an eighth grader on May 12, 1961, his expected score would be 8.8, meaning that he had completed eight full months of his eighth grade year. If his actual grade equivalent reading score was 8.4, his grade discrepancy score would be -.4 (the difference between 8.8 and 8.4). To avoid negative numbers, a constant of 5 was added to all grade equivalent discrepancy scores. Thus, in the example used above, the child's grade equivalent discrepancy score would be 4.6 (-.4 + 5.0).

In order to clarify the relationship of the achievement data to the teacher's nomination of the child as one who displays socially approved or disapproved classroom behavior, the following example is given: A sixth grader was nominated in May, 1962. Achievement data nearest to that date was from a test given in February, 1962. His expected grade equivalent score would be 6.5. His actual equivalent score in reading was 8.8, a difference of 2.3. Adding the constant of 5, made his grade equivalent discrepancy score 7.3, the score used in the statistical analyses.

In the statistical analyses which involved grade equivalent scores, the results are presented as grade equivalent discrepancy scores. Thus, for example, a mean score of 5.0 would mean the achievement level was exactly as would be expected; 5.5 would mean a level of 5 months above the expected; 4.5, 5 months below the expected.

In the cases of 61 of the 120 ninth grade subjects for whom achievement data were available as percentile scores, the scores were converted to T-scores and treated separately from the grade equivalent data in the analyses.

In dealing with the T-score data, the mean, which is 50, and the standard deviation, which is 10, were each divided by 10. This transformation was done to keep the magnitude of the numbers similar to the grade equivalent deviation scores. Thus, a mean transformed "T-score" of 5.0 indicates the 50th percentile; a mean transformed "T-score" of 6.0 indicates the 84th percentile.

The intelligence level data were from those collected from each child's school record and used in the analyses in Phase I of this research project. IQ scores were in the main from a wide variety of group intelligence tests, although a small number were from individual tests. The tests most frequently used were the Kuhlman-Anderson, the Henmon-Nelson, and the California Test of Mental Maturity.

Results

The means of the grade equivalent discrepancy scores in reading and the means of the IQ scores for third and sixth graders are presented in Tables 2.1 and 2.2, respectively. The analysis of variance for reading scores is presented in Table 2.3. The analysis of variance for IQ scores is presented in Table 2.4.

In the analysis of variance for the reading scores of the third and sixth graders, the F ratio for behavior of 56.82 (1 and 192 d.f.) is significant at well beyond the .01 level of confidence. The mean grade equivalent discrepancy score for the approved third and sixth graders is 6.6; for the disapproved, 5.2. The F ratio for sex, 5.57 (1 and 72 d.f.), is significant at the .05 level of confidence. The mean for the girls, 6.14, exceeds that for the boys, 5.70, by more than 3 grade equivalent months.

The analysis of variance for IQ's produced an F ratio for behavior of

52.72 (1 and 192 d.f.) and for sex of 9.60 (1 and 192 d.f.), both of which are significant at the .01 level. The mean IQ for the approved third and sixth graders is 113.31, while for the disapproved group, it is 102.04. For the boys, the mean IQ score was 105.27 and for the girls it was 110.08.

In the analysis of covariance for third and sixth grade reading scores as reported in Table 2.5 with IQ as a covariate, the F ratio for behavior is still significant at the .01 level of confidence. It should also be noted that the interaction of behavior and grade is now significant at the .05 level of confidence. The adjusted means were then calculated using the within-groups regression coefficient as a factor in the adjustment equation. The adjusted means are reported in Table 2.1. For the four groups determined by grade and behavior, the means are as follows: approved grade six, 6.62; approved grade three, 5.94; disapproved grade three, 5.63; and disapproved grade six, 5.48. The two disapproved groups are thus about one-half grade above expected levels while the approved third graders are about one full grade above and the approved sixth graders are more than a grade and a half above the expected level for their grade placement.

The means for the ninth graders whose reading achievement scores were in grade equivalent form and the means of the IQ's for this same group are presented in Tables 2.6 and 2.7, respectively. The analyses of variance for these reading achievement scores and for the IQs are reported in Tables 2.8 and 2.9. In the analysis of variance for the reading scores, the F ratio for behavior, 10.98 (1 and 44 d.f.), is significant at the .01 level of confidence. The mean for the approved group is 6.83, for the disapproved, 5.20.

For this group of ninth graders, the analysis of variance for IQ scores produced results which were similar to the results for third and sixth graders. The F ratio of 9.95 for behavior (1 and 44 d.f.) is significant at the .01 level of confidence. The mean IQ for the approved is 116.21 and for the disapproved, 104.37.

The analysis of covariance for the ninth grade reading grade equivalent discrepancy scores, with IQ as the covariate, as reported in Table 2.10, produced no significant F ratios. The F ratio of 2.64 (1 and 43 d.f.) for behavior is below that required for significance at the .05 level, 4.06, but is nearly significant at the .10 level of confidence.

Table 2.11 offers further analyses of these reading achievement data by showing the frequency distribution of the grade equivalent discrepancy scores for grades three, six, and nine. In the third grade, only five (10%) of the approved group had reading achievement scores below those which would be expected of the average for their grade levels on the national norms, namely 5.0 in terms of grade equivalent discrepancy scores; while 23 (46%) of the disapproved children, achieved below the average of 5.0. Conversely, 25 (50%) of the approved third graders scored more than one and one-half years above the expected; while only seven (14%) of the disapproved children accomplished at this level.

Somewhat similar results are shown for grade six. Seven (14%) of the scores of the approved children were below the average for their grade equivalent levels; 22 (44%) of the scores of the disapproved were below. In fact, 12 (24%) were more than one year below the average. Thirty-two (64%) of the sixth grade approved children had scores more than a year and a half above the expected; twelve (24%) of the disapproved children achieved at this level. In grade nine, three (12%) of the 24 approved

ninth graders had scores which were below the average for their grade equivalent level; four times that number, 12 (50%) of the 24 disapproved, had scores below the expected. While 15 (62%) of the approved group had scores more than one and one-half years above the expected, only six (25%) of the disapproved ninth graders achieved at this level.

The means for the 44 ninth grade students whose reading achievement scores were dealt with in terms of transformed "T-scores" and the means of the IQ scores for this group are presented in Tables 2.12 and 2.13. The analyses of variance for these data are presented in Tables 2.14 and 2.15.

Consistent with the data for the third, sixth, and other ninth graders in this study, the analysis of variance for reading achievement scores ("T-scores") of this group of ninth graders resulted in an F ratio of 68.76 for behavior (1 and 40 d.f.) which is significant beyond the .01 level of confidence. The mean for the approved group was 6.20, for the disapproved, 4.73. (These scores, it should be remembered, are scores for which the mean is 5.0 and the standard deviation is 1.0.) Also, as was true with the other groups of children in this study, the analysis of variance for the IQ scores of this group of ninth graders produced an F ratio which was significant at the .01 level of confidence: 33.56 (1 and 40 d.f.). The mean IQ for the approved group was 119.77, for the disapproved, 102.18.

The analysis of covariance for these reading achievement scores in "T-score" form with IQ as the covariate is reported in Table 2.16. The F ratio of 5.33 for behavior is significant at the .05 level of confidence (1 and 39 d.f.). The adjusted mean of 5.46 for the approved group, as reported in Table 2.12, exceeds the adjusted mean of 5.07 for the disapproved group.

The frequency distribution of the tranformed "T-scores" in reading

achievement for the approved and disapproved ninth grade students is given in Table 2.17. None of the approved group scored below the mean while 13 (59%) of the disapproved scored below. Seventeen (78%) of the approved group scored at least one standard deviation above the mean. Only one (5%) of the disapproved group achieved at this level.

Arithmetic Achievement Results

The means of the grade equivalent discrepancy scores in arithmetic for the third and sixth graders are reported in Table 2.18. The analysis of variance for these scores is presented in Table 2.19. The F ratio for behavior of 38.98 (1 and 192 d.f.) is significant at the .01 level of confidence. The mean for the approved third and sixth graders is 5.92, for the disapproved, 4.90. It should also be noted that the F ratio for the interaction of behavior x grade, 5.69 (1 and 192 d.f.), is significant at the .05 level of confidence. The mean for approved sixth graders, as shown in Table 2.18, is unusually high, 6.22, while the disapproved third and sixth graders had nearly identical means of 4.99 and 4.81, respectively.

The analysis of covariance for third and sixth grade arithmetic scores with IQ as the covariate, as reported in Table 2.20, shows an F ratio of 7.50 (1 and 191 d.f.) for behavior which is significant at the .01 level of confidence. The F ratio of 4.58 (1 and 191 d.f.) for grade is significant at the .05 level of confidence. Furthermore, the F ratio of 12.91 (1 and 191 d.f.) for the interaction of behavior by grade is now significant at the .01 level of confidence, whereas it was only significant at the .05 level in the analysis of variance.

The adjusted mean of 5.58 for the approved, as shown in Table 2.18, exceeds the adjusted mean of 5.25 for the disapproved, and the adjusted

mean of 5.57 for grade six is greater than the adjusted mean of 5.25 for grade three. The adjusted means for behavior by grade were as follows: approved grade six, 6.01; disapproved grade three, 5.36; approved grade three, 5.15; and disapproved grade six, 5.14.

The means for the ninth graders whose arithmetic achievement scores were in grade equivalent form are presented in Table 2.21 and the analysis of variance is presented in Table 2.22. As was found for the third and sixth grade arithmetic achievement data, the F ratio for behavior, 12.16 (1 and 44 d.f.), is significant at the .01 level of confidence. The mean for these approved ninth graders is 7.25 and the mean for the disapproved ninth graders is 5.66.

The analysis of covariance, again with the IQ as the covariate, for the ninth grade arithmetic grade equivalent discrepancy scores, as reported in Table 2.24, produced no F ratios significant at the .05 level; but the F ratio of 3.01 (1 and 43 d.f.) for behavior is significant at the .10 level of confidence.

Table 2.24 presents the frequency distribution of the grade equivalent discrepancy scores in arithmetic achievement for grades three, six, and nine. Twelve (24%) of the approved group of third graders achieved below the average for their grade levels on national norms. Thirty-one (62%) of the disapproved third graders scored below the expected. While nine (18%) of the approved third graders scored more than one and one-half years above their grade expectancy levels, only two (4%) of the disapproved did so. For the sixth grade, a similar picture is presented. Five (10%) of the approved sixth graders had scores below the expected; more than five times that number, 27 (54%) of the disapproved sixth graders scored below the average for their grade levels. Twenty (40%) of the approved children had

scores more than one and one-half years above the grade expectancy. Fewer than half of that number, eight (16%) of the disapproved achieved at a level more than one and one-half years above the expected levels. In grade nine, seven (28%) of the disapproved group had arithmetic achievement scores below the level expected for the ninth grade. None of the approved group fell in this category. Eighteen (75%) of the approved achieved at levels at least one and one-half years above the grade expectancy. Ten (42%) of the disapproved achieved at this level.

The means for the ninth grade students whose arithmetic achievement scores were in terms of transformed "T-scores" are reported in Table 2.25; and the analysis of variance for these scores is presented in Table 2.26. The analysis of variance produced an F ratio for behavior of 34.49 (1 and 40 d.f.), which is significant at the .01 level of confidence. The mean "T-score" for the apprcved ninth graders is 6.00, and the disapproved ninth grade students have a mean "T-score" of 4.47.

The analysis of covariance for these ninth grade "T-scores" with IQ as the covariate is presented in Table 2.27. The F ratio for behavior of 6.76 (1 and 39 d.f.) is significant at the .05 level of confidence and approaches the .01 level of significance for which an F of 7.33 would be required. The adjusted mean for approved children was 5.26 and for the disapproved it was 4.81 (Table 2.25).

The frequency distribution of the "T-scores" in arithmetic achievement for the 44 ninth graders is given in Table 2.28. Among the approved children, only two (9%) scored below the mean of 5.00 for national norms. Among the disapproved, however, 17 (78%) scored below this level. Five of the 22 disapproved ninth graders scored at or above the average for their grade. Twenty of the approved ninth graders (90%) scored at or above the

mean of 5.0.

Summary and Discussion

The first purpose of this chapter was to answer the question: Are there significant differences in scholastic achievement between children who display socially approved behavior in the classroom and children who consistently display socially disapproved behavior? The findings of this research indicate that such differences do indeed exist. The reading and arithmetic achievement of the approved children is higher than the reading and arithmetic achievement of the disapproved children.

The second question was concerned with the intelligence levels of the approved and disapproved children. This question was considered to be crucial because of its relevance to achievement in basic skills. The findings indicate clearly that the children who consistently display socially disapproved classroom behavior have a lower mean IQ than the approved children. This is in agreement with results reported previously (Thurston, Feldhusen, and Benning, 1964) for the entire sample of 384 children from whom the 292 used in this research were drawn. However, it should be noted that even though the disapproved children had a significantly lower mean IQ than the approved, the mean IQ for the disapproved was above 100. Thus, they were in no sense intellectually retarded.

The third question was stated as follows: Are there differences in achievement in basic skills of reading and arithmetic between children who display socially approved classroom behavior and children who display disapproved behavior when the IQ factor is statistically equalized with the technique of covariance analysis? Again the answer is clearly that there are significant differences. Even with IQ as a covariate, the children whose classroom behavior is socially disapproved are achieving at lower

levels in reading and arithmetic than the children whose classroom behavior is socially approved.

For both reading and arithmetic achievement at the third and sixth grade levels, the interaction of behavior by grade was significant. The approved sixth graders were a full year ahead of their expected level in arithmetic and approximately a year and six months advanced in reading achievement beyond their expected levels. The disapproved third and sixth graders and the approved third graders were all achieving close to their expected levels in arithmetic. In reading, the disapproved third and sixth graders were about one half year ahead of the expected levels of achievement while the approved third graders were about one year ahead of their expected levels.

Inasmuch as variance in achievement among children is known to increase with each additional year of school, the higher level performance of the approved sixth graders may be partly a function of greater openness for some of these children to move to higher levels in basic skills. Inspection of the standard deviations of the approved and disapproved sixth graders in both reading and arithmetic revealed that they were uniformly greater than the standard deviations for third graders. While the differences do not seem great enough to jeopardize the assumption of homogeneous variance, they are all in the same direction, larger for sixth graders, and all about five achievement months in magnitude.

Some comment about the overall general level of achievement of these children also seems appropriate. For each of the grade levels investigated in this research -- three, six, and nine -- the mean achievement score of the approved group of children is well above the average for grade level. But it should be noted that even though the achievement of the disapproved

children is significantly lower than that of their approved counterparts, their mean achievement scores nonetheless tend to approximate the average for their grade levels on national norms. In fact, in reading achievement the disapproved children have means which are slightly above the national average for their respective grades. On this basis the disapproved might be judged to be achieving satisfactorily in school.

It would surely be of interest in some future research to investigate the status of these disapproved children on the basis of their local school norms and also on their own classroom norms. For it is in his own classroom that a child's perception of himself as a student is established. It may be that information gained from such research would provide a clearer picture of the child's status among his complete peer group. Each child must have a source of pride in himself. It may come from the acknowledgement by his family that he is a loved and valued person. He may have unusual physical skills or mechanical ability. He may have intellectual or academic aptitudes which will allow him a sense of genuine self-satisfaction and accomplishment. For the average disapproved child in this study, it would appear that he can count on few, if any, of these on which to build a satisfying self-concept. Mere average performance in arithmetic or reading may not be particularly helpful to such a child. Such achievements may offer no effective counter-evidence to the child's developing point of view that he is at best only a mediocre individual.

Since the findings of this research suggest that the differences in scholastic achievement between the approved and disapproved groups of children tend to be greater than would be expected on the basis of differences in IQ level alone, it seems most likely then that there are other factors

operating in the lives of these children which contribute to their differences in academic performance. Some of these factors are clearly indicated by results reported in Phase I of this study (Thurston, Feldhusen, and Benning, 1964) and by results reported elsewhere in the present report. Significant differences between the approved and disapproved children were found in their reactions to the KD Proneness Scale, a sentence completion scale, a story completion instrument, in their responses to many interview questions, in the responses of their mothers' and fathers' child-rearing practices, in their health status, and in their contacts with law enforcement agencies. The identification of factors associated with some global description of behavior as socially approved or disapproved does not, of course, specify a causal relationship. However, consistent with other research evidence, the researchers were inclined to regard the aspects of child-rearing reflected in the ratings of the parents on the Glueck factors, the four additional interviewer ratings and the parents' responses to many interview questions as causally related to the maladaptive behavior of the disapproved children. The school achievement difficulties of the disapproved children, likewise, probably result in large part from the family and other background factors. School achievement difficulties themselves may come to contribute to a child's misbehavior in the classroom. At any given time in the life of the child, his weaknesses in basic achievement in reading and arithmetic may become new and increasing sources of frustration which heighten his predisposition to maladaptive behavior.

The differences in home and family influences as reflected in the Glueck ratings, Interviewer Ratings, and in responses to the mother, father, and child questionnaires lead the researchers to suggest that the approved children could well be referred to as "advantaged" and the disapproved as

"disadvantaged" children. If these family factors do indeed influence the child's total functioning in school, then they should be dealt with to help the child improve in his school behavior, social and academic. There is always the possibility - although usually a slim one - that the family might somehow change toward more positive ways of living, either through its own volition or through the help of some outside agency. But failing this or perhaps in addition to this, the child should also be given help which will compensate for the disadvantages with which he comes to school. Such help must come early in the life of the child if it is to be effective. The school has the potential and the opportunity to offer this help. The teacher who truly understands the "disadvantaged" child; the curriculum which is flexible enough to meet his special needs; the availability of special help when necessary are factors which can help the child toward greater success and satisfaction in at least one very important area of his life - school. And since success is infectious, it may be felt in the other areas of his life as well.

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Table 2.1

Means and Standard Deviations for Third and Sixth Grade Reading Achievement Discrepancy Scores (Grade Equivalent Scores)

	Approved						Disapproved					
	Males			Females			Males			Females		
Grade	Mean	Adjusted Mean	SD	Mean	Adjusted Mean	SD	Mean	Adjusted Mean	SD	Mean	Adjusted Mean	SD
3rd	6.19	5.81	1.15	6.66	6.07	1.19	5.16	5.65	0.91	5.37	5.61	1.05
6th	6.64	6.57	1.43	7.03	6.67	1.58	4.80	5.33	1.43	5.50	5.62	1.73

	Mean	Adjusted Mean	Standard Deviation
Approved	6.63	6.28	1.35
Disapproved	5.21	5.55	1.32
Males	5.70	5.84	1.43
Females	6.14	5.99	1.56
Grade 3	5.85	5.79	1.23
Grade 6	5.99	6.05	1.77
Approved Grade 3	6.42	5.94	1.17
Disapproved Grade 3	5.26	5.63	0.97
Approved Grade 6	6.83	6.62	1.49
Disapproved Grade 6	5.15	5.48	1.60

Table 2.2

Means and Standard Deviations for Third and Sixth Grade IQ Scores

	Approved				Disapproved			
	Males		Females		Males		Females	
Grade	Mean	SD	Mean	SD	Mean	SD	Mean	SD
3rd	113.88	12.41	117.16	9.11	99.56	10.92	103.96	8.46
6th	108.72	11.08	113.48	12.63	98.92	11.43	105.72	11.09

	Mean	Standard Deviation
Approved	113.31	11.56
Disapproved	102.04	10.72
Males	105.27	12.89
Females	110.08	10.72
Grade 3	108.64	12.46
Grade 6	106.71	12.57
Approved Grade 3	115.54	10.79
Disapproved Grade 3	101.76	9.82
Approved Grade 6	111.10	11.88
Disapproved Grade 6	102.32	11.54

Table 2.3

Analysis of Variance for Third and Sixth Grade Reading Achievement Discrepancy Scores (Grade Equivalent Scores)

Factor	df	MS	F
Behavior	1	10138.88	56.82 *
Sex	1	994.58	5.57 **
Grade	1	103.68	0.58
Behavior x Sex	1	0.98	0.01
Behavior x Grade	1	338.00	1.89
Sex x Grade	1	52.02	0.29
Behavior x Sex x Grade	1	100.81	0.56
Within Cell	192	178.45	
Total	199		

* Significant at .01 level of confidence 6.76

** Significant at .05 level of confidence 3.89

Table 2.4

Analysis of Variance for Third and Sixth Grade IQ Scores

Factor	df	MS	F
Behavior	1	6350.65	52.72 *
Sex	1	1156.81	9.60 *
Grade	1	186.25	1.55
Behavior x Sex	1	31.20	0.26
Behavior x Grade	1	310.00	2.57
Sex x Grade	1	47.04	0.39
Behavior x Sex x Grade	1	2.64	0.02
Within cell	192	120.44	
Total	199		

* Significant at .01 level of confidence 6.76

** Significant at .05 level of confidence 3.89

Table 2.5

Analysis of Covariance for Third and Sixth Grade Reading Achievement Discrepancy Scores With IQ as Covariate (Grade Equivalent Scores)

Factor	df	MS	F
Behavior	1	2118.22	15.81 *
Sex	1	109.82	0.82
Grade	1	340.53	2.54
Behavior x Sex	1	5.88	0.04
Behavior x Grade	1	838.57	6.25 **
Sex x Grade	1	9.09	0.07
Behavior x Sex x Grade	1	81.82	0.61
Within cell	191	134.11	
Total	198		

* Significant at .01 level of confidence 6.77

** Significant at .05 level of confidence 3.89

Table 2.6

Means and Standard Deviations for Ninth Grade Reading Achievement Discrepancy Scores (Grade Equivalent Scores)

	Approved			Disapproved		
	Mean	Adjusted Mean	SD	Mean	Adjusted Mean	SD
Males	6.84	6.32	1.71	5.27	5.36	2.06
Females	6.82	6.29	1.30	5.12	5.43	1.66

	Mean	Adjusted Mean	Standard Deviations
Approved	6.83	6.31	1.48
Disapproved	5.20	5.40	1.83
Males	6.06	6.27	2.02
Females	5.97	6.07	1.69

Table 2.7

Means and Standard Deviations for Ninth Grade IQ Scores

for Ss with Grade Equivalent Achievement Scores

	Approved		Disapproved	
	Mean	Standard Deviation	Mean	Standard Deviation
Males	116.25	14.36	106.17	8.87
Females	116.17	9.46	102.58	17.35

	Mean	Standard Deviation
Approved	116.21	11.89
Disapproved	104.37	13.60
Males	111.21	12.76
Females	109.37	15.32

Table 2.8

Analysis of Variance for Ninth Grade Reading Achievement

Discrepancy Scores (Grade Equivalent Scores)

Factor	df	MS	F
Behavior	1	3185.02	10.98 *
Sex	1	9.19	.03
Behavior x Sex	1	4.69	.02
Within cell	44	290.21	
Total	47		

* Significant at .01 level of confidence 7.26

** Significant at .05 level of confidence 4.07

Table 2.9

Analysis of Variance for Ninth Grade IQ Scores for Ss With Grade Equivalent Achievement Scores

Factor	df	MS	F
Behavior	1	1680.33	9.95 *
Sex	1	40.33	0.24
Behavior x Sex	1	36.75	0.22
Within cell	44	168.88	
Total	47		

* Significant at .01 level of confidence 7.26

** Significant at .05 level of confidence 4.07

Table 2.10

Analysis of Covariance for Ninth Grade Reading Achievement Discrepancy Scores With IQ as the Covariate (Grade Equivalent Scores)

Factor	df	MS	F
Behavior	1	521.39	2.64
Sex	1	3.21	0.02
Behavior x Sex	1	5.93	0.03
Within cell	43	197.50	
Total	46		

* Significant at .01 level of confidence 7.25
** Significant at .05 level of confidence 4.06

Table 2.11

Frequencies of Reading Achievement Grade Equivalent Discrepancy Scores of 100 Third Grade, 100 Sixth Grade, and 48 Ninth Grade Students Divided According to Approved-Disapproved Behavioral Status

	Third		Sixth		Ninth	
Range	Approved	Disapp.	Approved	Disapp.	Approved	Disapp.
7.0 and above	38% (19)	4% (2)	52% (26)	12% (6)	58% (14)	21% (5)
6.5 - 6.9	12% (6)	10% (5)	12% (6)	12% (6)	4% (1)	4% (1)
6.0 - 6.4	8% (4)	12% (6)	8% (4)	12% (6)	17% (4)	8% (2)
5.5 - 5.9	16% (8)	6% (3)	2% (1)	14% (7)	4% (1)	8% (2)
5.0*- 5.4	16% (8)	22% (11)	12% (6)	6% (3)	4% (1)	8% (2)
4.5 - 4.9	10% (5)	26% (13)	10% (5)	10% (5)	4% (1)	17% (4)
4.0 - 4.4	0% (0)	16% (8)	2% (1)	10% (5)	4% (1)	8% (2)
3.5 - 3.9	0% (0)	4% (2)	0% (0)	8% (4)	4% (1)	8% (2)
3.0 - 3.4	0% (0)	0% (0)	2% (1)	4% (2)	0% (0)	8% (2)
Below 3.0	0% (0)	0% (0)	0% (0)	12% (6)	0% (0)	8% (2)

* The mean for national norms would be 5.0.

Table 2.12

Means and Standard Deviations for Ninth Grade Reading Achievement Discrepancy Scores (T-scores)

	Approved			Disapproved		
	Mean	Adjusted Mean	SD	Mean	Adjusted Mean	SD
Males	6.14	5.26	.40	4.39	5.01	1.49
Females	6.26	5.64	.44	5.07	5.55	.73

	Mean	Adjusted Mean	Standard Deviations
Approved	6.20	5.46	.41
Disapproved	4.73	5.07	1.20
Males	5.27	5.51	1.39
Females	5.67	5.83	.85

Table 2.13

Means and Standard Deviations for Ninth Grade IQ Scores

for Ss with Achievement T-scores

	Approved		Disapproved	
	Mean	Standard Deviation	Mean	Standard Deviation
Males	121.82	13.82	101.45	10.21
Females	117.73	7.02	102.91	7.83

	Mean	Standard Deviation
Approved	119.77	10.90
Disapproved	102.18	8.91
Males	111.64	15.78
Females	110.32	10.49

Table 2.14

Analysis of Variance for Ninth Grade Reading Achievement Discrepancy Scores (T-scores)

Factor	df	MS	F
Behavior	1	2356.45	68.76 *
Sex	1	176.00	2.25
Behavior x Sex	1	87.30	1.12
Within cell	40	78.06	
Total	43		

* Significant at .01 level of confidence 7.31

** Significant at .05 level of confidence 4.08

Table 2.15

Analysis of Variance for Ninth Grade IQ Scores for Ss

With Achievement T-scores

Factor	df	MS	F
Behavior	1	3403.84	33.56 *
Sex	1	19.11	0.19
Behavior x Sex	1	84.51	0.83
Within cell	40	101.44	
Total	43		

* Significant at .01 level of confidence 7.31

** Significant at .05 level of confidence 4.08

Table 2.16

Analysis of Covariance for Ninth Grade Reading Achievement Discrepancy Scores with IQ as the Covariate (T-scores)

Factor	df	MS	F
Behavior	1	334.73	5.33 **
Sex	1	225.29	3.59
Behavior x Sex	1	30.78	0.49
Within cell	39	62.84	
Total	42		

* Significant at .01 level of confidence 7.33

** Significant at .05 level of confidence 4.09

Table 2.17

Frequencies of Reading Achievement T-scores of 44 Ninth Grade Students Divided According to Approved-Disapproved Behavioral Status

Range	Approved	Disapproved
7.0 and above	5% (1)	0% (0)
6.0 - 6.9	72% (16)	5% (1)
5.0* - 5.9	23% (5)	36% (8)
4.0 - 4.9	0% (0)	50% (11)
3.0 - 3.9	0% (0)	0% (0)
Below 3.0	0% (0)	9% (2)

* The mean for national norms would be 5.0.

Table 2.18

Means and Standard Deviations for Third and Sixth Grade Arithmetic Achievement Discrepancy Scores (Grade Equivalent Scores)

	Approved						Disapproved					
	Males			Females			Males			Females		
Grade	Mean	Adjusted Mean	SD	Mean	Adjusted Mean	SD	Mean	Adjusted Mean	SD	Mean	Adjusted Mean	SD
3rd	5.50	5.12	.84	5.75	5.17	.71	5.01	5.51	.79	4.97	5.20	.69
6th	6.09	6.02	1.26	6.36	6.00	1.26	4.54	5.07	1.59	5.08	5.20	1.65

	Mean	Adjusted Mean	Standard Deviation
Approved	5:92	5:58	1:08
Disapproved	4.90	5.25	1.25
Males	5:28	5:43	1:28
Females	5.54	5.39	1.26
Grade 3	5:30	5:25	.82
Grade 6	5.51	5.57	1.61
Approved Grade 3	5:62	5.15	0:77
Disapproved Grade 3	4.99	5:36	0:73
Approved Grade 6	6:22	6:01	1:24
Disapproved Grade 6	4.81	5.14	1.61

Table 2.19

Analysis of Variance for Third and Sixth Grade

Arithmetic Achievement Discrepancy Scores

(Grade Equivalent Scores)

Factor	df	MS	F
Behavior	1	5232.64	38.98 *
Sex	1	325.13	2.42
Grade	1	218.41	1.63
Behavior x Sex	1	0.13	.00
Behavior x Grade	1	764.41	5.69 **
Sex x Grade	1	114.01	0.85
Behavior x Sex x Grade	1	102.24	0.76
Within cell	192	134.24	
Total	199		

* Significant at .01 level of confidence 6.76

** Significant at .05 level of confidence 3.89

Table 2.20

Analysis of Covariance for Third and Sixth Grade
Arithmetic Achievement Discrepancy Scores
With IQ as the Covariate
(Grade Equivalent Scores)

Factor	df	MS	F
Behavior	1	772.63	7.50 *
Sex	1	0.29	0.00
Grade	1	471.10	4.58 **
Behavior x Sex	1	10.38	0.10
Behavior x Grade	1	1328.83	12.91 *
Sex x Grade	1	51.05	0.50
Behavior x Sex x Grade	1	86.03	0.84
Within cell	191	102.96	
Total	198		

* Significant at .01 level of confidence 6.77

** Significant at .05 level of confidence 3.89

Table 2.21

Means and Standard Deviations for Ninth Grade Arithmetic Achievement Discrepancy Scores (Grade Equivalent Scores)

	Approved			Disapproved		
	Mean	Adjusted Mean	SD	Mean	Adjusted Mean	SD
Males	7.54	7.02	1.38	5.63	5.72	1.77
Females	6.97	6.44	.93	5.69	6.00	2.02

	Mean	Adjusted Mean	Standard Deviations
Approved	7.25	6.73	1.19
Disapproved	5.66	5.87	1.86
Males	6.59	6.80	1.83
Females	6.33	6.43	1.67

Table 2.22

Analysis of Variance for Ninth Grade Arithmetic Achievement Discrepancy Scores (Grade Equivalent Scores)

Factor	df	MS	F
Behavior	1	3040.08	12.16 *
Sex	1	80.08	0.32
Behavior x Sex	1	120.33	0.48
Within cell	44	249.98	
Total	47		

* Significant at .01 level of confidence 7.26

** Significant at .05 level of confidence 4.07

Table 2.23

Analysis of Covariance for Ninth Grade Arithmetic Achievement Discrepancy Scores With IQ as the Covariate (Grade Equivalent Scores)

Factor	df	MS	F
Behavior	1	469.80	3.01
Sex	1	16.92	0.11
Behavior x Sex	1	241.36	1.55
Within cell	43	156.13	
Total	46		

* Significant at .01 level of confidence 7.25

** Significant at .05 level of confidence 4.06

Table 2.24

Frequencies of Arithmetic Achievement Grade Equivalent Discrepancy Scores of 100 Third Grade, 100 Sixth Grade, and 48 Ninth Grade Students Divided According to Approved-Disapproved Behavioral Status

Range	Third		Sixth		Ninth	
	Approved	Disapp.	Approved	Disapp.	Approved	Disapp.
7.0 and above	4% (2)	2% (1)	26% (13)	10% (5)	58% (14)	29% (7)
6.5 - 6.9	14% (7)	2% (1)	14% (7)	6% (3)	17% (4)	13% (3)
6.0 - 6.4	18% (9)	8% (4)	16% (8)	8% (4)	8% (2)	8% (2)
5.5 - 5.9	16% (8)	6% (3)	14% (7)	8% (4)	13% (3)	8% (2)
5.0*- 5.4	24% (12)	20% (10)	20% (10)	14% (7)	4% (1)	13% (3)
4.5 - 4.9	18% (9)	42% (21)	4% (2)	14% (7)	0% (0)	8% (2)
4.0 - 4.4	6% (3)	18% (9)	2% (1)	10% (5)	0% (0)	4% (1)
3.5 - 3.9	0% (0)	2% (1)	2% (1)	12% (6)	0% (0)	4% (1)
3.0 - 3.4	0% (0)	0% (0)	2% (1)	8% (4)	0% (0)	8% (2)
Below 3.0	0% (0)	0% (0)	0% (0)	10% (5)	0% (0)	4% (1)

* The mean for national norms would be 5.0.

Table 2.25

Means and Standard Deviations for Ninth Grade Arithmetic Achievement Discrepancy Scores (T-scores)

	Approved			Disapproved		
	Mean	Adjusted Mean	SD	Mean	Adjusted Mean	SD
Males	6.19	5.31	.71	4.36	4.74	1.20
Females	5.81	5.20	.72	4.58	4.88	.72

	Mean	Adjusted Mean	Standard Deviations
Approved	6.00	5.26	.72
Disapproved	4.47	4.81	.97
Males	5.28	5.52	1.34
Females	5.19	5.36	.94

Table 2.26

Analysis of Variance for Ninth Grade Arithmetic Achievement Discrepancy Scores (T-scores)

Factor	df	MS	F
Behavior	1	2565.82	34.49 *
Sex	1	7.36	0.10
Behavior x Sex	1	99.00	1.33
Within cell	40	74.40	
Total	43		

* Significant at .01 level of confidence 7.31

** Significant at .05 level of confidence 4.08

Table 2.27

Analysis of Covariance for Ninth Grade Arithmetic Achievement Discrepancy Scores With IQ as the Covariate (T-scores)

Factor	df	MS	F
Behavior	1	402.49	6.76 **
Sex	1	0.91	0.02
Behavior x Sex	1	38.31	0.64
Within cell	39	59.50	
Total	42		

* Significant at .01 level of confidence 7.33

** Significant at .05 level of confidence 4.09

Table 2.28

Frequencies of Arithmetic Achievement T-scores of 44 Ninth Grade Students Divided According to Approved-Disapproved Behavioral Status

Range	Approved	Disapproved
7.0 and above	9% (2)	0% (0)
6.0 - 6.9	36% (8)	5% (11)
5.0* - 5.9	45% (10)	18% (4)
4.0 - 4.9	9% (2)	58% (13)
3.0 - 3.9	0% (0)	14% (3)
Below 3.0	0% (0)	5% (1)

* The mean for national norms would be 5.0.

Chapter 3

The Relationship of Classroom Behavior to Contacts With Law Enforcement Agencies

In a report of Phase I of this research (Thurston, Feldhusen, and Benning, 1964) and in a summary statement in Chapter 1 (pp. 4-6) of this report, the authors reported findings regarding the relationship of classroom behavior to delinquency proneness. Children who displayed socially disapproved classroom behavior were more delinquency prone than children who manifested approved behavior according to evidence from the Glueck Social factors for predicting juvenile delinquency.

In Phase II of the Eau Claire County Youth Study an effort was made to determine whether youngsters who behaved in a disapproved manner in school were more likely than their approved counterparts to exhibit delinquent behavior outside the school. This chapter is concerned with the following question: Are the children who are identified by their teachers as displaying socially disapproved behavior in school more likely to have police or sheriff's department records than the children whose school behavior was socially approved?

Procedure

The chief of police of the City of Eau Claire and the sheriff of Eau Claire County agreed to make information from their records available to the researchers. The data were gathered from these law enforcement agencies in December, 1964. At this time, the police and sheriff's departments were given a list of the 384 children in the study and were asked to indicate which children were known to them in their records, the frequency of contact for each child who was known, and the date(s) of contact.

Results

The data based on contacts or lack of contact by the police and sheriff's departments for the 384 children are reported in Table 3.1. The subjects are arranged in 24 subgroups, divided equally on the basis of classroom behavior, grade level, home location, and sex. Because of the relatively small number of children in these subgroups, statistical tests of differences (chi-square) were not done. Chi-squares were computed for the larger and potentially more meaningful groups defined by the independent variables of this study. These groups are shown in Table 3.2. These tables give the number of children who had no record in the police or sheriff's departments, the number of children with only one contact, and the number of children with multiple entries.

For the comparison of approved and disapproved children, Table 3.2 shows a chi-square of 35.35, which is significant at the .01 level of confidence (2 d.f.). Inspection of the data reveals that the disapproved children were more frequently known by law enforcement agencies than were the approved. There were 21 disapproved children who had one contact and 31 who had two or more contacts. Only 12 approved children had one contact and only one had two or more contacts. Thus, the two groups differed most markedly in the number of children with multiple entries in law enforcement agency records.

This differentiation held for both boys and girls as Table 3.2 shows. For the boys, the chi-square of 31.29 was significant at the .01 level of confidence (2 d.f.). The difference was slight in the category of one contact. However, 28 disapproved boys had two or more contacts while only one approved boy had two or more contacts. For the girls, the chi-square of 8.02 was significant at the .05 level of confidence (2 d.f.). Nine

disapproved girls had one contact and three had two or more. Only 2 approved girls had one contact and none of the approved girls had two or more contacts.

The differences between boys and girls produced a chi-square of 29.08, which is significant at the .01 level of confidence (2 d.f.). Far more boys than girls had police or sheriff records. Twenty-two of the boys and 11 of the girls had one contact. A total of 29 boys had two or more contacts but only three girls had two or more contacts.

The urban-rural difference is significant at the .01 level of confidence (chi-square = 21.04, 2 d.f.). Examination of the table reveals that the names of urban children were noted more often in the police and sheriff's records than were the rural. Twenty-three urban children had one contact and 26 had two or more. Among the rural children, 10 had one contact and 6 had two or more contacts.

Urban boys were more often contacted by police and sheriff's departments than rural boys. The chi-square of 19.68 is significant at the .01 level of confidence (2 d.f.). The difference is substantial at both levels of frequency of contact. Sixteen urban boys had one contact and 23 had two or more. Among rural boys there were only 6 in each of these two categories. While in the same direction as the boys, the difference in incidence of contact between urban and rural girls is not statistically significant.

Grade differences are also significant at the .01 level of confidence (chi-square = 17.76, 4 d.f.). Inspection of the data reveals that 11 children at each grade level had one police or sheriff contact. In the category of two or more contacts, however, a marked increase in frequency

by grade is noted. Two third graders, 8 sixth graders, and 21 ninth graders had multiple contacts.

Discussion

Both the boys and the girls who were nominated by their teachers as displaying persistent socially disapproved, disruptive, aggressive behavior in the classroom are more likely to have been contacted by the police and sheriff's departments than the boys and girls whose school behavior was socially approved. Boys are more frequently known by the police or sheriff than are girls; and the boys living in the city have a greater number of contacts with law enforcement officials than rural boys.

These disapproved children who have more frequent contact with law enforcement agencies in the county than the approved are the ones who had been identified earlier as being more delinquency prone than their approved counterparts (Thurston, Feldhusen, and Benning, 1964). Classroom misbehavior, thus, seems to be related to misconduc , outside of the school.

While it is obvious that virtually all children misbehave in the classroom occasionally, in many cases the misbehavior represents a more-or-less transient reaction to current stressful situations. But it is the child who persists in aggressive or disruptive behavior in school who should be of particular concern. Such persistent misconduct may indicate that the child's world is deeply frustrating and unsatisfying. By his misbehavior he reveals a need for help. But at the same time his conduct is often so intolerable that it alienates and isolates him from his teachers, the very ones who might be of service. This means that he is denied an important source of help.

The school is the agency which has contact with all children. In

school, those children who display aggressive tendencies should become the focus of intensive study and attention. School misbehavior may be an early sign of a predisposition which will eventually erupt in the form of anti-social behavior which will bring them in contact with law enforcement agencies. Accordingly, the ability of the teacher to identify and evaluate maladaptive behavior within the classroom may have significance which extends far beyond school behavior problems, per se.

Reference

Thurston, J. R.; Feldhusen, J. F.; and Benning, J. J. Classroom Behavior: Background Factors and Psycho-Social Correlates. Madison, Wisconsin: State Department of Public Welfare, 1964.

Table 3.1

Frequencies of Police and Sheriff's Departments Records for the Groups of 16 Ss*

Group	No contact	1 Contact	Repeated Contacts
A3UM	15	1	0
A3UF	16	0	0
D3UM	10	4	2
D3UF	13	3	0
A3RM	16	0	0
A3RF	16	0	0
D3RM	12	3	1
D3RF	16	0	0
A6UM	12	4	0
A6UF	16	0	0
D6UM	6	3	7
D6UF	15	1	0
A6RM	16	0	0
A6RF	16	0	0
D6RM	14	1	1
D6RF	14	2	0
A9UM	12	3	1
A9UF	15	1	0
D9UM	2	1	13
D9UF	11	2	3
A9RM	14	2	0
A9RF	15	1	0
D9RM	12	0	4
D9RF	15	1	0

* A = approved, D = disapproved; the number represents grade level; U = urban, R = rural; M = male, and F = female.

Table 3.2

Police and Sheriff's Departments Contacts

for Major Subgroups

Group	No Contact	One Contact	Repeated Contacts	Total	Chi-square	df
Approved	179	12	1	192	35.35 *	2
Disapproved	140	21	31	192		
Males	141	22	29	192	29.08 *	2
Females	178	11	3	192		
Urban	143	23	26	192	21.04 *	2
Rural	176	10	6	192		
Third Grade	114	11	3	128		
Sixth Grade	109	11	8	128	17.76 *	4
Ninth Grade	96	11	21	128		
Approved Males	85	10	1	96	31.29 *	2
Disapproved Males	56	12	28	96		
Approved Females	94	2	0	96	8.02 **	2
Disapproved Females	84	9	3	96		
Urban Males	57	16	23	96	19.68 *	2
Rural Males	84	6	6	96		
Urban Females	86	7	3	96	4.02	2
Rural Females	92	4	0	96		

* Significant at .01 level of confidence

** Significant at .05 level of confidence

Chapter 4

The Relationship of Physical Health to Classroom Behavior and Its Correlates

In his classic work on delinquency, H. W. Thurston (1942) reported that the rate of delinquency was high for children whose general health status or condition was low or poor. He also reported that the incidence of disease was positively correlated with incidence of delinquency. In his interpretation of the relationship between delinquency and health, Thurston suggested that poor health and disease result in feelings of inferiority, discouragement, and bewilderment and thus add to the burden of frustrations which are often present in the lives of delinquency prone children. The frustrated youth then attempts to alleviate the frustrations with acts of aggression and delinquency. It should be noted, of course, that Thurston's approach was chiefly one of mustering expert opinion. To a considerable extent the reader is placed in the position of judging the validity of claims or generalizations.

In Physique and Delinquency (1956) the Gluecks reported that health status in infancy was significantly associated with delinquency, but the relation was small from a practical or predictive point of view. They concluded that health does not exert a significant impact on tendency toward crime.

McCord and McCord (1959) reported in The Origins of Crime that in the sample of children which they studied the health status of the children bore no relationship to later criminal tendencies. However, they did find that 75 percent of a sample of boys who suffered from severe acne later developed criminal records. They indicate that children with neurological

problems such as brain damage and epilepsy were also found to have slightly greater criminal tendencies than children not having these disabilities.

In a special report, The Health of Children and Youth in Rural Areas (1963), written for the National Conference on Problems of Youth in a Changing Environment, Wallace describes the various health problems which beset American youth. She points out that mortality among youth due to accidents and disease has decreased significantly in recent years. However, data from Selective Service physical examinations revealed that only 50.9 percent of young men examined in 1961 were found acceptable for military service. Wallace suggests that an effective school and community health program should serve to detect and help correct a large portion of the health problems which arise among youth. She notes that adolescence is a time of great psychological strain and that health problems, added to others, may constitute an almost overwhelming burden psychologically for the affected youngsters.

Remmers and Radler (1951) reported results of the Purdue Opinion Poll on the problems of The American Teenager. They noted that the teenager is greatly concerned about his body, about health problems, and about physical growth changes. They suggest that the teenager would like programs of health education and periodic medical checkups. They also report that teenagers from low income families have more health problems than those from other income brackets. Since delinquency is also more prevalent among low income families, it might be assumed that health problems might beset the delinquent more frequently than non-delinquent youth.

However, as a contrasting point of view, Kvaraceus (1959) points out that urban delinquents have been found to be physically robust, of athletic body structure, and by no means overly beset by illness and disease. In

Physique and Delinquency (1956) the Gluecks reported that there is an excess of mesomorphs (athletic build) among delinquents. The mesomorph is also characterized by good health and relative freedom from disease.

Of course, there is still the possibility that among the large amorphous group called "delinquents," there are many individual cases for whom the etiology traces to physical disability, disease, and deformity. Healy and Bronner (1948) asserted that they had found individual cases in which the delinquency was largely a reaction to the frustrations produced by a physical handicap. Most important of the frustrations, they asserted, were taunts and jibes from peers.

In Juvenile Delinquency in Modern Society (1961) Neumeyer suggests that there is no expert agreement on the physical status of delinquents. He also suggests that no phase of delinquency has been more thoroughly investigated since health status becomes available on all incarcerated delinquents. The medical examination is a standard part of admission practice for all correctional and penal institutions. However, from the fourteen references which he cites, Neumeyer says the results are inconclusive. He also argues that in any event, a direct causal relationship between health and behavior seems unlikely to be found. Rather it is the individual's reactions, his attitudes toward his misfortunes, which turn out to be motivators of behavior.

The problem is complex and it has strong psychological components. There may be instances in which glandular and neurological functions of the organism or weaknesses due to ill health may predispose the child to socially unacceptable behavior e.g. the ill-controlled behavior of the post-encephalitic child. However, it seems more likely that psychological reactions of physically affected children and people with whom they interact constitute the major bases of maladaptive behavior if a relationship

between physical health status and behavior is found.

Fundamentally, all children have basic psychological needs for affection, need for approval by authority figures, need for approval by peers, need for independence, and need for competence and self-respect (Cronbach, 1963). Health problems may frustrate the satisfaction of any of these needs. The youngster who is frequently ill, particularly if his illnesses demand time and attention, may come to be less well loved or even disliked by his parents and siblings. Overprotection and oversympathy may also set the stage for psychological difficulties. Some authorities believe that over-concern on the part of others may well mask deeper feelings of hostility which find expression in a multitude of subtle and devious ways. The child's ill health may also remove him too often from contact with adults who could offer the approval of authority figures. Need for approval by other children may be even more hazardous to achieve since strength and good health are particularly admired by them. Need for independence can scarcely be satisfied for the child whose poor health may make him excessively dependent on his parents and others. Finally, the need for competence and self-respect may also beg for satisfaction in a child whose health status may be generally debilitating. It may be extremely difficult for him to find a way to demonstrate competence. His self-concept may come increasingly to incorporate perceptions of himself as an ill, dependent, and insufficient person.

The circumstances of this research offered an opportunity to inquire into the relationships between physical health status and classroom behavior because the students had been selected from an area served by a single Health Department. The department is known as the City-County Health Department because it serves both the urban and surrounding rural areas. The activities of the department include kindergarten roundups for preschool

children, periodic vision and hearing screening, immunization clinics, and a program for health education in the schools. These services are in addition to actual supervision of family health problems by the staff nurses.

This chapter will then be concerned with the following questions: (1) Is physical health status as reflected in the City-County Health Department contacts with the child related to his socially disapproved or approved classroom behavior? (2) Is physical health status related to other characteristics such as sex, grade level in school, and home location?

Procedure

The Director of the Eau Claire City-County Health Department was consulted concerning the records of Health Department contacts with urban and rural families in the county. He reported that records were available for all Health Department contacts and referrals. He also indicated that he and his staff would cooperate in checking records of the 384 children involved in the Eau Claire County Youth Study to determine if they had been contacted by his agency for a health problem.

Contacts with and referral to the City-County Health Department frequently represent an effort to assist less favored or economically deprived citizens to cope with their health problems. Referrals are made by schools, welfare agencies, the courts, and other community agencies. The Health Department offers some direct service through its nursing consultants and otherwise stands ready to assist families in securing medical or other health services.

There was extended discussion regarding the type of information from the Health Department files which could be of maximal use in the study. The records gave information on dates of contacts, frequency of contacts,

type of health problems, and disposition of cases in terms of whether or not the families were receiving health supervision. It was finally decided that the information which could be used most profitably for the present study was the presence or absence of a contact. Thus, the list of 384 subjects and their families was checked against the Health Department records to determine if the child had ever been seen. Comparisons were then planned for the subgroups defined by the independent variables, classroom behavior, grade level, sex, and home location as urban or rural.

Results

The frequencies of Health Department contacts for the 384 children divided into 24 subgroups according to classroom behavior, grade level, home location, and sex are reported in Table 4.1. Close inspection of the table shows that the frequency of Health Department contact ran high for disapproved groups. However, because of the relatively small number in these basic groups, it was decided to do statistical tests of difference (chi-square) only for some larger and potentially more meaningful groups defined by the independent variables.

Table 4.2 gives the frequencies for Health Department contact first for the approved and disapproved children. The chi-square of 12.62 is significant at the .01 level of confidence (1 d.f.). This chi-square and all of 2 x 2 chi-squares reported below were corrected for continuity (Edwards, 1960). Inspection of the table reveals that the children who consistently exhibited socially disapproved classroom behavior were more frequently seen by the Health Department. There were no significant sex differences; in fact, the frequencies of contact for boys and girls were nearly identical, 116 to 117.

The urban-rural difference is significant at the .01 level of confidence (chi-square equals 8.58, 1 d.f.). A total of 102 urban children and 131 rural children had been contacted.

The frequencies of contact for the three grade levels were also almost identical, 80, 76, and 77 for third, sixth, and ninth grades respectively, and the chi-square of 2.82 for grades is not significant (2 d.f.).

The frequency of Health Department contact was higher for disapproved males than for approved males, 69 to 47, and the chi-square of 9.60 is significant at the .01 level of confidence (1 d.f.). The frequency for disapproved females also exceeded the frequency for approved females, 65 to 52, but this difference produced a chi-square of only 3.15 which is not significant at the .05 level of confidence (1 d.f.).

Discussion

The children who consistently exhibit socially disapproved classroom behavior and those who are from rural areas are more frequently known to Health Department personnel than those who behave in an approved fashion in school or who are from urban areas. Other evidence of this study indicates that the rural and the disapproved children are from less favored homes generally. Twenty-four percent of families who live in rural areas in Eau Claire County have incomes below $3000 annually according to figures supplied by the Director of the City-County Health Department, while only 14 percent of urban families have incomes below $3000. Similar inferences could be drawn about the homes of the disapproved children because many of their fathers were found to be less well educated and working in low status occupations according to data reported in Classroom Behavior: Background Factors and Psycho-Social Correlates (Thurston, Feldhusen, and Benning, 1964).

Thus, the Health Department contact of the disapproved children and of the children from rural homes may simply represent the alternative to regular, private medical care which may be purchased by the families of children whose behavior is socially approved or by more families who live in the city.

It is also possible that the educational status of the parents of the socially disapproved children is related to the more frequent Health Department contact of these children. Data reported in Phase I of the Eau Claire County Youth Study (Thurston, Feldhusen, Benning, 1964) reveals that the fathers and mothers of disapproved children completed less formal education than the fathers and mothers of approved children. It seems likely that the lower educational status of some of these parents of disapproved children would make the parents less knowledgeable in relation to problems of preventive health practices, in relation to problems of judging when health care is needed, and in relation to knowledge of the location and types of service available.

From another point of view, the Health Department contacts of the disapproved children may represent the more frequent referral by other social agencies with whom the families have contact. Referral by the school and court for health problems is common. Such cases might represent the end-products of a prolonged circumstance involving the child and family. When and if the case is sufficiently severe to draw the attention of an outside observer, it obviously might indicate a more severe and potentially more frustrating condition.

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Table 4.1

Health Department Contacts For

the Groups of 16 Ss*

	Seen	Not Seen
A3UM	5	11
A3UF	8	8
D3UM	12	4
D3UF	9	7
A3RM	11	5
A3RF	11	5
D3RM	13	3
D3RF	11	5
A6UM	5	11
A6UF	10	6
D6UM	12	4
D6UF	10	6
A6RM	9	7
A6RF	8	8
D6RM	11	5
D6RF	11	5
A9UM	5	11
A9UF	5	11
D9UM	10	6
D9UF	11	5
A9RM	12	4
A9RF	10	6
D9RM	11	5
D9RF	13	3

* A = approved, D = disapproved, the number represents grade level, U = urban, R = rural, M = male, and F = female.

Table 4.2

Health Department Contacts for

Major Subgroups

	Seen	Not Seen	Total	Chi-square	df
Approved	99	93	192	12.62*	1
Disapproved	134	58	192		
Males	116	76	192	0.00	1
Females	117	75	192		
Urban	102	90	192	8.58*	1
Rural	131	61	192		
Third Grade	80	48	128		
Sixth Grade	76	52	128	2.82	2
Ninth Grade	77	51	128		
Approved Males	47	49	96	9.60*	1
Disapproved Males	69	27	96		
Approved Females	52	44	96	3.15	1
Disapproved Females	65	31	96		

* Significant at .1 level of confidence

** Significant at .05 level of confidence

Table 4.3

Health Department Contacts for High and Low

Delinquency Prone Groups

	Seen	Not Seen	Total	Chi-square	df
High Delinquency Proneness (Glueck)	29	19	48	1.05	1
Low Delinquency Proneness (Glueck)	23	25	48		
High Delinquency Proneness Disapproved	17	7	24	2.14	1
Low Delinquency Proneness Approved	11	13	24		
High Delinquency Proneness Approved	12	12	24	0.00	1
Low Delinquency Proneness Disapproved	12	12	24		
High Delinquency Proneness Approved	12	12	24	1.39	1
High Delinquency Proneness Disapproved	17	7	24		
Low Delinquency Proneness Approved	11	13	24	0.00	1
Low Delinquency Proneness Disapproved	12	12	24		

Chapter 5

Correlations Among Major Variables and Multiple Regression Analyses

Introduction

The problem of the persistently misbehaving aggressive child in the classroom has received extended discussion in the writing describing Phase I of the Eau Claire County Youth Study (Thurston, Feldhusen, and Benning, 1964) and in this Phase II report. As has been indicated previously, the reasons for this concern with these aggressive children are basically twofold: 1) Such classroom behavior has important, deleterious effects on the climate of the classroom and consequently upon the educational experiences of all children including those who persistently misbehave; and 2) this misbehavior may be the precursor of more serious problems such as dropping out of school and juvenile delinquency. The increased understanding derived from such study could provide a basis for alleviation and remediation of the problems of these children. Phase I of this research was devoted in large part to an assessment of the psycho-social and family background characteristics of children who displayed aggressive behavior in the classroom.

This chapter of the Phase II report deals with further evaluation of these psycho-social and family background factors. Correlations among major study variables and multiple regression analyses were undertaken in this regard. The goals of this analysis involved the assessment of the relationships of these many variables, singly and in combination, with the primary independent variable of the study, behavioral status in the classroom, and the determination of relationships among these variables.

The Standard and Empirical Variables

Two multiple regression analyses were made in this study. One analysis involved a set of 19 variables (standard variables) for which scoring systems had been developed independently of the sample used in this study. The multiple correlation of this set of variables with classroom behavior status as the criterion was computed with a sample of 384 children to be described in the next section and with certain subgroups of the total sample. The variables are described in detail in the Phase I report. The following is the list of the 19 standard variables:

(1) A teacher's rating of each child on a list of nine, anti-social, low aggressive traits: rude, sullen, quarrelsome, resentful, steals, lies, is tardy or absent without excuse, uses profanity or obscenity, and deceptive.

(2) Score on the Kvaraceus Delinquency Proneness Scale (KD Adjusted Scores).

(3) Composite score for the 5 Glueck Social Factors for Predicting Juvenile Delinquency (Glueck 5-Factor).

(4) Composite score for the 4 best factors of the Glueck Scales (Glueck 4-Factor).

(5) Adjustment score based on the child's responses to a story involving a child who was caught cheating in school (Situation I).

(6) Adjustment score based on the child's responses to a story involving a child who is blamed unfairly (Situation II).

(7) Adjustment score based on the child's responses to a story involving a child who is affronted socially (Situation III).

(8) Adjustment score based on the child's responses to a story involving a child who has a conflict with a parent over a clothing purchase (Situation IV).

(9) Total score for responses to the four stories (Situation Total).

(10) Intelligence quotient taken from school records (IQ).

(11) Score on items of the KD Proneness Scale which relate to school (Area 1).

(12) Score on KD Scale items which relate to failure, fear, misconduct, and aggression (Area 2).

(13) Score on KD Scale items which relate to peer relations and recreation (Area 3).

(14) Score on KD Scale items which relate to occupations and the future (Area 4).

(15) Score on KD Scale items which reflect personal preferences (Area 5).

(16) Score on KD Scale items which relate to family, adults, and control of behavior (Area 6).

(17) The total score on a set of 18 negative behavior traits rated by the child's teacher (Trait Total). This is the total of high and low aggressive traits.

(18) Chronological age in months.

(19) A teacher's rating on a list of nine anti-social, high aggressive traits: bullying, destructiveness, fighting, disrupts class, defiant, has temper tantrums, overly dominant, talks back, and cruel.

In another multiple correlation analysis five additional variables were added to the original 19 described above. These five variables were scored on the basis of results stemming from the first half of the total sample, namely 192 children. Scoring systems were developed to maximize discriminations between the children who displayed disapproved classroom behavior and those who manifested approved behavior. These variables, called empirical variables, were then tested in a new sample along with the 19 standard variables described above. The test was a cross-validation analysis and was limited to the second half of the sample (192 children) who had not been used in developing the empirical scoring system. The following are the empirical variables:

(1) Sentence completion adjustment scores as the sum of scores for 20 completions.

(2) A total score for 3 Glueck Factors (Glueck Empirical) based on weights derived by calculating the percentage of known criterion groups of children who displayed socially approved and anti-social classroom behavior who were rated at the various levels for each factor.

(3) A total score for combined prediction weights on intelligence, five Interviewer Ratings, the mother's occupation level, and the father's occupation level (IQ-Interviewer Rating-Occupation Empirical).

(4) A total score for items of the KD Scale which were found by item analysis to be discriminators between the criterion groups (KD Empirical).

(5) A gross empirical score for the total of 2, 3, and 4 above.

The derivation of those empirical variables is described in detail in chapters six and nine of the Phase I report.

The Samples

The 19 standard variables were employed with the total sample of 384 children. The selection of this sample and the data-gathering procedures are described fully in the Phase I report. In brief, classroom teachers in public and parochial schools at the third, sixth, and ninth grade levels throughout Eau Claire County, Wisconsin, nominated the two boys and the two girls who were displaying the most socially disapproved and the two boys and the two girls who were displaying the most socially approved behavior. The teacher was also given a list of 18 negative behavior traits and asked to check those which were persistently displayed by each child. In addition to a total score, this scale yielded sub-scores for nine high aggressive traits and nine low aggressive, covert, anti-social traits.

The data-gathering portion of the study required two years. In the first year 192 children were selected randomly from the pool of 1550 nominees according to the following criteria: behavior as socially approved or disapproved; grade at time of nomination as three, six, or nine; sex; and home location as urban or rural. Eight children were drawn for each cell representing a combination of these four factors such as the following: approved, third grade, males whose homes were in rural areas. There were 24 such cells.

These 192 children were then tested and interviewed. The parents of these children were also interviewed. Trained social workers administered the psychological tests to the child and interviewed the mother, father,

and child with standardized questionnaires. The data from this first year sample was used to develop the scoring systems for the empirical variables described earlier.

A second group (2nd year sample) of 192 children was selected according to the same criteria as the first year sample. The testing and interviewer procedures were the same as with the first year sample. The data from this second year group was used in the cross-validation of the five empirical variables.

The first multiple correlations to be reported in this chapter are based only on the second year (cross-validation) sample of 192 children. In this analysis the multiple correlations are reported for all 192 children and for the 96 boys and 96 girls separately. Both the standard and the empirical variables are used in this analysis.

The second multiple correlations to be reported are based on the total sample of 384 children using only the 19 standard variables for which scoring systems were derived independently of the present study or without reference to the criterion groups used in this study. Multiple correlations are reported for all 384 children and for the 192 boys and 192 girls separately.

The Criterion

The criterion, or Y variable, is general classroom behavior status as socially approved or disapproved. Actual prediction is not yet possible in this study since the variables and the criterion were all assessed at the same time. Thus, "concurrent multiple correlation of a set of variables with a criterion" is the more appropriate description. The criterion behavior of classroom behavior status was defined in detail for the teacher

who nominated the children. Particular emphasis was placed on the persistent, habitual, recurring nature of the behavior as opposed to the occasional offense. Hence, it is assumed that the criterion represents a general predisposition which may manifest itself in many ways.

It should be noted here that three of the standard variables are related to the criterion and possibly not entirely independent of it. The nominating teacher was also required to check the behavior traits (total, low aggressive, and high aggressive) which characterized each child. It is possible that the teacher's original commitment to the nomination would bias her to be productive in checking negative behavior traits for socially disapproved children. If she nominated a child as displaying socially approved behavior she might also be more inclined to avoid checking any negative traits.

The Multiple Correlation Technique

A special computer program was used which made it possible to calculate the multiple R for all of a set of variables with the criterion for a given group and then to remove variables, one at a time, which were contributing least to the multiple R, and to calculate a new multiple R at each level. An optimum level was sought according to the following criteria:

(1) A reduced set of variables for which the F ratios (of each variable) would be significant at or beyond the .05 level of confidence.

(2) The multiple R for the reduced set not to be significantly lower than the multiple R for the complete battery of variables.

(3) The multiple R for the reduced set to be significantly greater than zero at the .01 level of confidence.

(4) The standard error of measurement for the reduced set not to be greater than the error for the total battery.

Since the original battery of variables was quite large and the total sample moderate in size, shrunken multiple Rs were calculated for all of the Rs which are reported (McNemar, 1965). Occasionally this produced a multiple R for the complete battery which was smaller than the R for the reduced set.

The general sequence of the tables used to present the analyses is as follows: first, a complete matrix of the variables and Y is reported as a set of simple correlations. Then, the multiple correlation of the same complete set of variables on Y and of the reduced set on Y is reported as a second table. The second table contains complete information for writing the regression equation. In the multiple correlation analyses the totals for Situation Exercises and the Gross Empirical were omitted because they are simple additive totals of variables already represented and hence they could offer no unique variance.

Since the regression equation was not formulated to calculate values of Y which could be the actual Y classification of each child, it may be well to note that the standard error of Y as estimated from the battery of variables has been reduced about 30 percent when R = .70, about 40 percent when R = .80 (McNemar, 1965).

Results

The simple correlations among 24 standard and empirical variables for the 192 youngsters of the cross-validation (2nd year) sample are reported in Table 5.1 and the simple correlation for the boys and the girls separately are reported in Table 5.2. The simple correlations of each of

the 24 variables and Y (classroom behavior status as socially approved or disapproved) are given in column five of Tables 5.3, 5.4, and 5.5. Most of the intercorrelations among variables are low. This is, of course, desirable in terms of their possibly making a contribution later to the multiple R. However, it may be noted that high aggressive, low aggressive, and total traits are quite highly intercorrelated. Since, as noted before, these may not be entirely independent measures, the intercorrelations are not surprising. Intercorrelations among the KD adjusted score (total score with a constant added to eliminate negative values) and the KD area scores are also quite high as are intercorrelations between the two Glueck scores.

Close inspection of Table 5.2 reveals that the intercorrelations for boys and girls are usually quite similar although some large differences are also noted. For example, the KD Adjusted Score correlates much higher with Glueck scores among boys than among girls. The KD Empirical Score also shows considerable shifts in the correlations with other variables between boys and girls.

The first multiple correlation for all the standard and empirical variables used in relation to classroom behavior status (Y) for the 192 children of the cross-validation sample is reported in Table 5.3. For the total set, the shrunken multiple R is .81. The reduced set at which all variables have F ratios significant at the .05 level of confidence consists of the following variables: low and high aggressive traits scores, the Glueck 5-Factor Score, the Sentence Completion Score, the Glueck Empirical Score, the KD Empirical Score, the KD Area 1 Score, the KD Area 5 Score, and chronological age. The shrunken multiple R at this level is .82.

The multiple correlation for all the standard and empirical variables for the 96 boys of the cross-validation sample is reported in Table 5.4.

A shrunken multiple R of .84 was produced for all variables. For the reduced set, the R was .84 also. The reduced set of variables at which all have F ratios which are significant at the .05 level of confidence consists of the following six variables: low and high aggressive traits scores, the Glueck 4-Factor Score, the Glueck Empirical Score, the KD Empirical Score, and chronological age. Since the Glueck 5-Factor and the Glueck 4-Factor scores are closely related, it may be concluded that six of the variables are common to both sets.

The multiple correlation for the standard and empirical variables combined for the 96 girls of the cross-validation sample is reported in Table 5.5. The shrunken multiple R for the complete battery is .81, and for the reduced set of four variables, it is also .81. The four variables are the score on Situation Exercise III, the Sentence Completion Score, the empirical score for the combination of IQ-Interviewer Ratings-Parents' Occupations, and the total score on low and high aggressive traits.

The correlation matrixes for the 19 standard variables are presented in Tables 5.6 (all 384 Ss) and 5.7 (boys and girls). For all 384 children the intercorrelations among variables are generally low to moderate except for the several sets which include closely related variables. This pattern holds true throughout Table 5.7. Sex differences are particularly marked in some correlations involving the KD Adjusted Score with other variables.

The multiple correlation for the battery of 19 standard variables with all 384 children is presented in Table 5.8. The correlations of each variable with the criterion of classroom behavior status are also reported in Table 5.8. The shrunken multiple R for all variables is .78. The reduced set consists of five variables for which the multiple R is .79.

The five variables are: low and high aggressive traits scores, IQ, the KD Area 2 Score, and chronological age.

The multiple correlation for standard variables with 192 boys is reported in Table 5.9. The shrunken multiple R for all 19 variables is .80. For the reduced set, the multiple R is .80. The variables in the reduced set are the low and high aggressive traits scores, the Situation Exercise III Score, IQ, the KD Area 2 Score, and chronological age.

The multiple correlation involving standard variables for 192 girls is given in Table 5.10. The shrunken R for all variables is .78 and for the reduced set of two it is also .78. The two variables are IQ and the total score for high and low aggressive traits. IQ is thus seen to be a significant variable in the reduced sets for boys and girls but otherwise the two sets are not alike. It should also be noted that five of the six variables of the reduced set for boys are the same as the five which constitute the reduced set for all 384 Ss.

Summary and Discussion

When the standard and empirical variables were analyzed in relation to classroom behavior status in a single matrix, three empirical variables were found to have a significant multiple correlation with classroom behavior status. For all 192 children in the cross-validation sample, they were the sentence completion adjustment score and the Glueck and KD empirical scores. In addition, the empirical score which was a composite of IQ, Interviewer Ratings, and occupational classifications of the parents was highly related to the classroom behavior of girls.

The standard variables were all the other variables for which assessments of adjustment, delinquency proneness, or intelligence were based on

scoring procedures developed by other researchers or independent of findings from subjects used in the present study. In this multiple correlation of standard and empirical variables, the significant variables, which contributed unique variance to the correlation with classroom behavior status, were the low and high aggressive traits scores, the Glueck 5-Factor Score, the KD Area 1 Score (for reactions to school), the KD Area 5 Score (for indications of personal preferences), and chronological age.

When the standard variables were correlated with the criterion without the empirical variables, the best contributors of unique variance were the low and high aggressive traits scores, IQ, the KD Area 2 Score (for reactions to failure, fear, misconduct, and aggression), and chronological age. Approximately the same levels of multiple R were achieved under both arrangements of standard plus empirical variables and standard variables alone.

Reversing the process one might then attempt to delineate the major characteristics which are related to classroom behavior status as socially approved or disapproved, according to this multiple regression analysis. The following characteristics would be included:

(1) Low aggressive behavior traits such as being deceptive, sullen, rude, or resentful.

(2) High aggressive behavior traits such as being destructive, disruptive in class, or cruel to other children.

(3) Delinquency proneness according to the Glueck Factors which assessed parental discipline, supervision, and affection for the child, and family cohesiveness.

(4) Social adaptability of the child's responses on a sentence completion scale.

(5) Intelligence

(6) Responses to KD scale items which deal with failure, fear, misconduct, and aggression.

(7) Responses to KD items which relate to school.

(8) Responses to KD items which inquire about simple personal preferences.

(9) Social adaptability of responses to the Situation Exercise III which asked what a youngster would say or do when he is "snubbed" socially.

(10) Chronological age.

References

1. McNemar, Q. Psychological Statistics. New York: John Wiley, 1965.

2. Thurston, J. R.; Feldhusen, J. F.; and Benning, J. J. Classroom Behavior: Background Factors and Psycho-Social Correlates. Madison, Wisconsin: State Department of Public Welfare, April, 1964.

Table 5.1

Correlation Matrix for Standard and Empirical Variables for

All of the Cross Validation Sample (all 2nd year Ss)

Variable	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
1. Low Aggressive Traits		.25*	.36*	.37*	.13	.09	.06	.15**	.15**	.14**	-.39*	.31*	.41*	.23*	.20*	.13	.12	.21*	.16**	.25*	.42*	.92*	.03	.68*
2. KD Adjusted Score			.24*	.23*	.05	.06	-.06	.04	.04	.15**	-.26*	.23*	.23*	.36*	.80*	.67*	.49*	.56*	.49*	.55*	.26*	.26*	-.02*	.23*
3. Glueck 5-Factor				.99*	.14**	.09	.00	.07	.11	.22*	-.48*	.94*	.74*	.40*	.19*	.25*	.14**	.17**	.13	.08	.86*	.29*	.15**	.18**
4. Glueck 4-Factor					.15**	.08	.01	.07	.11	.22*	-.47*	.92*	.72*	.41*	.18**	.24*	.16**	.18**	.12	.09	.84*	.30*	.16**	.18**
5. Situation Exercise I						.34*	.29*	.29*	.71*	.19*	-.16**	.14**	.21*	.18**	.08	.10	.12	.09	-.03	-.05	.20*	.12	-.05	.08
6. Situation Exercise II							.19*	.36*	.72*	.00	-.04	.08	.08	.04	.08	-.02	.13	.08	.12	.00	.08	.11	-.06	.12
7. Situation Exercise III								.32*	.62*	.03	-.01	-.00	-.02	-.07	.01	-.04	.07	-.02	.01	-.00	-.02	.07	-.02	.06
8. Situation Exercise IV									.70*	-.01	-.06	.06	.06	.01	.08	.06	.13	.08	.05	-.04	.06	.10	.08	.03
9. Situation Exercise Total										.08	-.10	.11	.12	.07	.09	.04	.16**	.09	.06	-.03	.12	.14**	-.02	.11
10. Sentence Completion											-.16**	.21*	.23*	.42*	.12	.21*	.15**	.10	.01	.10	.24*	.10	-.17**	.03
11. IQ												-.46*	-.68*	-.31*	-.24*	-.22*	-.18**	-.29*	-.12	-.14**	-.66*	-.38*	-.16**	-.31*
12. Glueck Empirical													.66*	.35*	.20*	.24*	.09	.18**	.14**	.08	.83*	.25*	.14**	.16**
13. IQ-Int. Rating-Occup. Emp.														.46*	.19*	.24*	.15**	.23*	.12	.13	.96*	.39*	.13	.31*
14. KD Empirical															.34*	.46*	.22*	.27*	.16**	.09	.46*	.20*	-.19*	.14**
15. KD Area 1																.59*	.28*	.39*	.23*	.30*	.22*	.16**	-.41*	.10
16. KD Area 2																	.43*	.25*	.27*	.14**	.27*	.10	-.37*	.05
17. KD Area 3																		.11	.14**	.25*	.15**	.13	-.32*	.13
18. KD Area 4																			.22*	.33*	.24*	.22*	-.18**	.18**
19. KD Area 5																				.25*	.14**	.17**	-.23*	.16**
20. KD Area 6																					.13	.31*	-.37*	.31*
21. Gross Empirical																						.38*	.14**	.29*
22. Trait Total																							-.04	.91*
23. Chronological Age																								-.11
24. High Aggressive Traits																								
Means	1.51	43.38	186.77	136.47	1.77	1.71	1.98	1.85	7.31	40.70	107.43	148.76	403.90	26.84	18.60	17.01	19.68	18.66	19.62	19.03	553.17	2.81	146.82	1.30

* Significant at .01 level of confidence with r≥.19

** Significant at .05 level of confidence with r≥.14

Table 5.2

Correlation Matrix for Standard and Empirical Variables for Boys and Girls of Cross Validation Sample (2nd year Ss)

Variable	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
1. Low Aggressive Traits		.31* / .22**	.49* / .21**	.49* / .21**	.21** / .03	.06 / .07	.05 / .01	.08 / .19	.14 / .11	.16 / .13	-.43* / -.34*	.45* / .15	.52* / .29*	.32* / .21**	.23** / .26*	.24** / .10	.20** / -.01	.12 / .30*	.24** / .02	.24** / .21**	.54* / .27*	.91* / .94*	.27* / .02	.69* / .66*
2. KD Adjusted Score			.36* / .11	.34* / .11	.08 / .02	.07 / .07	-.14 / .07	.12 / -.02	.06 / .06	.23** / .08	-.32* / -.21**	.31* / .14	.34* / .13	.53* / .12	.32* / .79*	.68* / .69*	.46* / .55*	.63* / .56*	.58* / .39*	.54* / .65*	.38* / .14	.30* / .25**	-.51* / -.54*	.26* / .23**
3. Glueck 5-Factor				.99* / .99*	.24** / .03	.12 / .04	.07 / -.09	.08 / .06	.19 / .02	.29* / .15	-.52* / -.44*	.94* / .94*	.73* / .74*	.52* / .31*	.33* / .07	.40* / .12	.26* / .01	.19 / .15	.18 / .06	.15 / .00	.84* / .85*	.37* / .19	.03 / .26*	.20** / .14
4. Glueck 4-Factor					.24** / .06	.10 / .04	.09 / -.10	.06 / .06	.18 / .02	.28* / .16	-.50* / -.44*	.90* / .94*	.70* / .73*	.50* / .34*	.30* / .07	.38* / .11	.27* / .01	.19 / .16	.16 / .07	.15 / -.00	.81* / .88*	.37* / .19	.06 / .27*	.21** / .14
5. Situation Exercise I						.30* / .39*	.32* / .24**	.34* / .23**	.70* / .74*	.09 / .28*	-.24** / -.06	.24** / .04	.37* / .04	.23** / .16	.07 / .12	.14 / .09	.07 / .16	.18 / -.06	.1[illegible] / -.20**	-.1[illegible] / .01	.35* / .04	.15 / .06	.01 / -.13	.07 / .08
6. Situation Exercise II							.20** / .12	.38* / .28*	.72* / .71*	-.15 / .18	-.10 / .04	.11 / .04	.10 / .03	.08 / .09	.13 / .13	.05 / .01	.12 / .12	.06 / .03	.28* / -.14	-.13 / .06	.10 / .04	.07 / .10	.01 / -.13	.08 / .12
7. Situation Exercise III								.40* / .19	.65* / .55*	-.06 / .12	-.10 / .11	.06 / -.08	.03 / -.10	-.09 / .07	-.06 / .21**	-.09 / .18	.03 / .09	-.09 / -.01	-.01 / -.00	-.04 / -.06	.04 / -.10	.04 / .04	.15 / -.23**	.03 / .03
8. Situation Exercise IV									.74* / .64*	-.16 / .15	-.14 / .04	.08 / .04	.04 / .06	.04 / .08	.20** / .03	.16 / .06	.13 / .09	.08 / -.00	.15 / -.10	-.10 / -.08	.06 / .06	.04 / .13	.08 / .07	-.01 / .02
9. Situation Exercise Total										-.10 / .28*	-.21** / .04	.18 / .02	.20 / .02	.10 / .15	.12 / .18	.09 / .12	.13 / .17	.08 / -.01	.20** / -.18	-.15 / -.02	.20** / .02	.11 / .12	.08 / -.15	.06 / .10
10. Sentence Completion											-.15 / -.18	.31* / .13	.32* / .16	.42* / .44*	.17 / .06	.36* / .06	.12* / .20**	.19 / .02	.18 / -.15	.18 / .06	.34* / .17	.03 / .15	-.12 / -.22**	-.03 / .15
11. IQ												-.52* / -.41*	-.70* / -.65*	-.41* / -.26*	-.37* / -.17	-.36* / -.15	-.25** / -.09	-.27* / -.32*	-.20** / -.02	-.12 / -.13	-.69* / -.63*	-.43* / -.33*	-.08 / -.22**	-.35* / -.26*
12. Glueck Empirical													.72* / .61*	.47* / .24**	.30* / .11	.36* / .13	.15 / .02	.20** / .14	.18 / .10	.14 / .01	.85* / .81*	.34* / .13	.05 / .24**	.20** / .09
13. IQ-Int. Rating-Occup. Emp.														.57* / .59*	.33* / .09	.41* / .11	.21** / .07	.22** / .24**	.20** / .03	.15 / .09	.97* / .96*	.47* / .29*	-.01 / .27*	.36* / .24**
14. KD Empirical															.42* / .12	.58* / .12	.33* / .12	.44* / .21**	.31* / -.00	.24** / .11	.59* / .37*	.28* / .23**	-.30* / -.04	.21** / .20**
15. KD Area 1																.61* / .50*	.31* / .31*	.48* / .50*	.36* / .15	.38* / .42*	.38* / .11	.17 / .30*	-.38* / -.45*	.09 / .28*
16. KD Area 2																	.48* / .48*	.36* / .33*	.28* / .35*	.24** / .27*	.44* / .13	.19 / .12	-.33* / -.46*	.13 / .11
17. KD Area 3																		.03 / .21**	.13 / .13	.13 / .37*	.22** / .06	.17 / .06	-.19 / -.46*	.12 / .12
18. KD Area 4																			.32* / .04	.27* / .31*	.24** / .23**	.10 / .33*	-.28* / -.07	.07 / .28*
19. KD Area 5																				.20** / .29*	.21** / .06	.29* / -.06	-.34* / -.11	.31* / -.14
20. KD Area 6																					.17 / .07	.28* / .26*	-.37* / -.42*	.28* / .27*
21. Gross Empirical																						.47* / .27*	-.01 / .28*	.34* / .21**
22. Trait Total																							-.04 / -.04	.92* / .88*
23. Chronological Age																								-.12 / -.10
24. High Aggressive Traits																								
Means	1.76 / 1.25	42.77 / 43.99	189.18 / 184.36	139.73 / 133.21	1.80 / 1.74	1.82 / 1.61	2.06 / 1.90	1.93 / 1.77	7.60 / 7.02	40.57 / 40.82	108.55 / 108.30	149.65 / 147.87	407.29 / 400.50	25.31 / 28.36	17.57 / 19.64	15.97 / 18.04	19.86 / 19.50	19.18 / 18.15	19.81 / 19.43	19.74 / 18.32	557.98 / 548.36	3.46 / 2.17	147.26 / 146.39	1.67 / .93

1 The upper r of each pair is the correlation for boys, the lower is for girls

* Significant at .01 level of confidence with r ≥ .26

** Significant at .05 level of confidence with r ≥ .20

Table 5.3

Multiple Regression Analysis for 192 Children in a Cross-Validation Sample With Standard and Empirical Variables (Shrunken Multiple R)

Battery		Items	Regression Coefficients	F	Correlation with Y
I All Variables:	1.	Low Aggressive Traits	.086	0.79	.75
R = .81	2.	KD Adjusted Score	-.001	0.01	.23
R^2 = .66	3.	Gluedk 5-Factor	.003	2.76	.38
d.f. = 169	4.	Glueck 4-Factor	-.001	0.29	.38
S.E. Est. = .29	5.	Situation Exercise I	-.018	0.18	.15
	6.	Situation Exercise II	.060	2.43	.14
	7.	Situation Exercise III	.052	1.21	.09
	8.	Situation Exercise IV	-.006	0.02	.12
	10.	Sentence Completion	.018	5.64	.25
	11.	IQ	-.003	1.49	-.42
	12.	Glueck Empirical	-.007	3.27	.29
	13.	IQ-Int. Rat-Occup-Emp.	-.000	0.00	.46
	14.	KD Empirical	.012	6.02	.37
	15.	KD Area 1	.013	1.41	.23
	16.	KD Area 2	.011	1.21	.20
	17.	KD Area 3	-.010	0.65	.14
	18.	KD Area 4	-.020	2.01	.15
	19.	KD Area 5	-.022	2.97	.05
	20.	KD Area 6	.004	0.09	.19
	22.	Trait Total	.034	0.13	.75
	23.	Chronological Age	.002	3.48	.04
	24.	High Aggressive Traits	.049	0.24	.63
	0.	Constant	1.069	0.24	
II Reduced Set[1]	1.	Low Aggressive Traits	.119	52.83	
R = .82*	3.	Glueck 5-Factor	.002	10.94	
R^2 = .67	10.	Sentence Completion	.019	6.71	
d.f. = 183	12.	Glueck Empirical	-.006	10.20	
S.E. Est. = .29	14.	KD Empirical	.012	7.02	
	15.	KD Area 1	.015	5.75	
	19.	KD Area 5	-.020	4.00	
	23.	Chronological Age	.002	6.12	
	24.	High Aggressive Traits	.087	26.46	
	0.	Constant	.404	0.36	

* This multiple R is not significantly lower than the multiple R for 22 variables. It is significantly greater than zero at the .01 level of confidence.

1 All F ratios for the reduced set of variables are significant at the .05 level of confidence. $F \geq 3.90$ for $p < .05$.

Table 5.4

Multiple Regression Analysis for 96 Boys in a Cross-Validation Sample With Standard and Empirical Variables (Shrunken Multiple R)

Battery		Items	Regression Coefficients	F	Correlation with Y
I All Variables:	1.	Low Aggressive Traits	.093	0.81	.80
R = .84	2.	KD Adjusted Score	.005	0.14	.34
R^2 = .70	3.	Glueck 5-Factor	-.001	0.16	.46
d.f. = 73	4.	Glueck 4-Factor	.004	1.64	.48
S.E. Est. = .28	5.	Situation Exercise I	-.047	0.55	.14
	6.	Situation Exercise II	.047	0.86	.12
	7.	Situation Exercise III	-.052	0.66	.04
	8.	Situation Exercise IV	.114	2.85	.16
	10.	Sentence Completion	.010	0.68	.16
	11.	IQ	-.005	1.65	-.49
	12.	Glueck Empirical	-.006	1.61	.39
	13.	IQ-Int.Rat.-Occup.-Emp.	-.001	0.11	.49
	14.	KD Empirical	.012	2.97	.39
	15.	KD Area 1	.005	0.09	.28
	16.	KD Area 2	.010	0.54	.32
	17.	KD Area 3	-.018	0.99	.23
	18.	KD Area 4	-.022	1.06	.12
	19.	KD Area 5	-.013	0.41	.23
	20.	KD Area 6	.012	0.50	.27
	22.	Trait Total	.023	0.05	.80
	23.	Chronological Age	.003	5.32	.08
	24.	High Aggressive Traits	.049	0.20	.67
	0.	Constant	1.410	0.08	
II Reduced Set[1]:	1.	Low Aggressive Traits	.125	32.33	
R = .84*	4.	Glueck 4-Factor	.002	5.65	
R^2 = .71	12.	Glueck Empirical	-.005	4.87	
d.f. = 90	14.	KD Empirical	.015	7.25	
S.E.Est. = .27	23.	Chronological Age	.003	6.25	
	24.	High Aggressive Traits	.070	12.85	
	0.	Constant	.774	4.36	

* This multiple R is not significantly lower than the multiple R for 22 variables. It is significantly greater than zero at the .01 level of confidence.

1 All F ratios for the reduced set of variables are significant at the .05 level of confidence. $F \geq 3.90$ for $p < .05$

Table 5.5

Multiple Regression Analysis for 96 Girls in a Cross-Validation Sample With Standard and Empirical Variables (Shrunken Multiple R)

Battery		Items	Regression Coefficients	F	Correlation with Y
I All Variables:	1.	Low Aggressive Traits	-.279	0.71	.71
R = .81	2.	KD Adjusted Score	-.004	0.08	.11
R^2 = .65	3.	Glueck 5-Factor	.005	3.32	.30
d.f. = 74	4.	Glueck 4-Factor	-.005	2.75	.29
S.E.Est. = .30	5.	Situation Exercise I	.040	0.37	.17
	6.	Situation Exercise II	.061	0.93	.18
	7.	Situation Exercise III	.134	3.09	.16
	8.	Situation Exercise IV	-.134	3.62	.09
	10.	Sentence Completion	.019	3.06	.33
	11.	IQ	.000	0.00	-.37
	12.	Glueck Empirical	-.002	0.28	.20
	13.	IQ-Int.Rat.-Occup.-Emp.	.002	2.41	.44
	14.	KD Empirical	.013	2.45	.38
	15.	KD Area 1	.001	0.01	.19
	16.	KD Area 2	.010	0.30	.08
	17.	KD Area 3	-.005	0.06	.38
	18.	KD Area 4	-.019	0.54	.21
	19.	KD Area 5	-.025	1.49	-.16
	20.	KD Area 6	-.001	0.00	.13
	22.	Trait Total	.427	1.65	.75
	23.	Chronological Age	.001	0.10	-.01
	24.	High Aggressive Traits	-.335	1.02	.65
	0.	Constant	.100	0.00	
II Reduced Set[1]:	7.	Situation Exercise III	.151	5.08	
R = .81*	10.	Sentence Completion	.026	8.43	
R^2 = .66	13.	IQ-Int.Rat.-Occup.-Emp.	.002	13.27	
d.f. = 92	22.	Trait Total	.119	104.62	
S.E. Est. = .29	0.	Constant	-.828	2.43	

* This multiple R is not significantly lower than the multiple R for 22 variables. It is significantly greater than zero at the .01 level of confidence.

[1] All F ratios for the reduced set of variables are significant at the .05 level of confidence. $F \geq 3.90$ for $p < .05$

Table 5.6

Correlation Matrix for Standard Variables for 384 Children

Factor	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
1. Low Aggressive Traits	.	.29*	.33*	.33*	.06	.06	.03	.08	.08	-.39*	.21*	.22*	.15*	.18*	.20*	.21*	.91*	-.01	.65*
2. KD Adjusted Score			.19*	.18*	.06	.09	.01	-.02	.05	-.29*	.77*	.66*	.52*	.52*	.44*	.55*	.30*	-.47*	.26*
3. Glueck 5-Factor				.99*	.11**	.10**	.06	.15*	.14*	-.37*	.12**	.19*	.15*	.16*	.08	.08	.28*	.15*	.19*
4. Glueck 4-Factor					.11**	.09	.05	.14*	.13**	-.36*	.12**	.18*	.17*	.16*	.08	.08	.29*	.17*	.20*
5. Situation Exercise I						.46*	.29*	.40*	.76*	-.09	.09	.07	.07	.17*	.03	-.03	.06	-.01	.05
6. Situation Exercise II							.29*	.41*	.75*	-.04	.08	.02	.11**	.13**	.12**	.05	.10**	-.04	.13**
7. Situation Exercise III								.41*	.67*	-.02	.01	-.01	.05	-.00	.05	.02	.02	-.04	.01
8. Situation Exercise IV									.75*	-.00	.02	.01	.02	.07	.01	-.05	.04	.12**	-.01
9. Situation Exercise Total										-.05	.06	.03	.08	.13**	.08	-.00	.08	.01	.07
10. IQ											-.25*	-.24*	-.16*	-.26*	-.15*	-.14*	-.40*	-.15*	-.34*
11. KD Area 1												.53*	.30*	.33*	.16*	.27*	.18*	-.36*	.12**
12. KD Area 2													.45*	.21*	.27*	.11**	.20*	-.35*	.15*
13. KD Area 3														.14*	.08	.25*	.17*	-.31*	.16*
14. KD Area 4															.18*	.31*	.21*	-.18*	.20*
15. KD Area 5																.22*	.20*	-.14*	.17*
16. KD Area 6																	.26*	-.34*	.27*
17. Trait Total																		-.06	.90*
18. Chronological Age																			-.10**
19. High Aggressive Traits																			
Means	1.37	42.83	188.59	138.36	1.86	1.72	1.88	1.84	7.30	108.63	18.48	16.95	19.65	18.90	19.52	18.79	2.56	146.93	1.18

* Significant at .01 level of confidence with $r \geq .14$

** Significant at .05 level of confidence with $r \geq .10$

Correlation Matrix for Standard Variables for Boys and Girls

Variable	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
1. Low Aggressive Traits			.44*	.43*	.06	.05	.07	.07	.09	-.43*	.28*	.35*	.21*	.10	.27*	.19*	.90*	-.00	.65*
			.19*	.20*	.05	.06	-.03	.08	.06	-.33*	.18**	.13	.08	.26*	.11	.21*	.93*	-.01	.66*
2. KD Adjusted Score			.31*	.30*	.14**	.18**	-.00	.07	.14**	-.35*	.79*	.69*	.49*	.61*	.55*	.55*	.38*	-.44*	.34*
			.06	.07	-.03	.02	.03	-.11	-.03	-.24*	.76*	.66*	.58*	.52*	.32*	.65*	.24*	-.51*	.21*
3. Glueck 5-Factor				.98*	.13	.10	.06	.13	.15**	-.37*	.23*	.37*	.23*	.18**	.14**	.14**	.38*	.06	.26*
				.99*	.08	.07	.05	.17**	.12	-.36*	.05	.04	.07	.09	.01	-.02	.15**	.25*	.07
4. Glueck 4-Factor					.12	.09	.06	.13	.14**	-.36*	.23*	.35*	.25*	.17**	.12	.14**	.37*	.08	.26*
					.09	.07	.04	.15**	.12	-.37*	.06	.03	.07	.10	.03	-.01	.16**	.26*	.09
5. Situation Exercise I						.40*	.36*	.36*	.74*	-.10	.15**	.15**	.09	.23*	.10	-.07	.05	-.04	.03
						.53*	.21*	.44*	.77*	-.07	.05	.01	.05	.10	-.05	-.00	.07	.01	.08
6. Situation Exercise II							.27*	.35*	.71*	-.06	.15**	.13	.15**	.13	.28*	.02	.10	-.09	.14**
							.32*	.46*	.79*	.01	.07	-.02	.06	.06	-.07	.02	.08	.01	.08
7. Situation Exercise III								.46*	.71*	-.05	-.03	-.02	.03	-.08	.10	.04	.06	-.00	.04
								.35*	.62*	.03	.10	.07	.06	.05	.00	-.04	-.05	-.08	-.06
8. Situation Exercise IV									.74*	.02	.07	.05	.03	.07	.09	-.03	.04	.06	.00
									.76*	-.02	-.09	-.02	-.00	.02	-.09	-.10	.03	.18**	-.04
9. Situation Exercise Total										-.07	.12	.11	.10	.13	.20*	-.01	.09	-.03	.07
										-.02	.05	.01	.06	.08	-.07	-.04	.05	.04	.02
10. IQ											-.34*	-.36*	-.22*	-.23*	-.21*	-.09	-.45*	-.13	-.39*
											-.19*	-.13	-.08	-.28*	-.07	-.16**	-.31*	-.17**	-.24*
11. KD Area 1												.55*	.29*	.47*	.29*	.36*	.24*	-.28*	.16**
												.41*	.36*	.38*	.03	.34*	.29*	-.46*	.19*
12. KD Area 2													.51*	.38*	.33*	.16**	.35*	-.30*	.30*
													.49*	.24*	.26*	.27*	.11	-.48*	.06
13. KD Area 3														.09	.12	.15**	.20*	-.18**	.17**
														.20*	.04	.34*	.12	-.45*	.13
14. KD Area 4															.25*	.24*	.14**	-.27*	.15**
															.09	.32*	.26*	-.09	.21*
15. KD Area 5																.16**	.31*	-.27*	.30*
																.30*	.06	.01	-.02
16. KD Area 6																	.25*	-.38*	.25*
																	.25*	-.32*	.24*
17. Trait Total																		-.05	.91*
																		-.07	.89*
18. Chronological Age																			-.10
																			-.12
19. High Aggressive Traits																			
Means	1.49	41.90	195.42	144.54	1.89	1.80	1.91	1.87	7.48	107.61	17.46	15.80	19.75	19.45	19.58	19.33	2.94	147.61	1.44
	1.25	43.76	181.76	132.18	1.84	1.64	1.84	1.80	7.12	109.65	19.51	18.10	19.55	18.35	19.47	18.24	2.18	146.26	.95

* Significant at .01 level of confidence with $r \geq .19$

** Significant at .05 level of confidence with $r \geq .14$

The upper number is for males; the lower number is for females.

Table 5.8

Multiple Regression Analysis for 384 Children With Standard Variables (Shrunken Multiple R)

Battery		Items	Regression Coefficients	F	Correlation with Y
I All Variables:	1.	Low Aggressive Traits	.143	2.24	.74
R = .78	2.	KD Adjusted Score	-.004	0.45	.25
R^2 = .62	3.	Glueck 5-Factor	.000	0.07	.33
d.f. = 366	4.	Glueck 4-Factor	.001	0.30	.33
S.E. Est. = .31	5.	Situation Exercise I	-.017	0.38	.04
	6.	Situation Exercise II	.033	1.23	.08
	7.	Situation Exercise III	-.039	1.62	-.02
	8.	Situation Exercise IV	-.001	0.00	.04
	10.	IQ	-.005	15.13	-.46
	11.	KD Area 1	.005	0.48	.20
	12.	KD Area 2	.019	6.43	.25
	13.	KD Area 3	-.005	0.31	.14
	14.	KD Area 4	-.006	0.42	.15
	15.	KD Area 5	-.011	1.33	.12
	16.	KD Area 6	.004	0.18	.16
	17.	Trait Total	-.002	0.00	.75
	18.	Chronological Age	.001	1.23	.04
	19.	High Aggressive Traits	.078	0.65	.63
	0.	Constant	1.830	6.23	
II Reduced Set[1]:	1.	Low Aggressive Traits	.142	133.40	
R = .79*	10.	IQ	-.005	16.58	
R^2 = .62	12.	KD Area 2	.014	6.83	
d.f. = 379	18.	Chronological Age	.001	4.50	
S.E. Est. = .31	19.	High Aggressive Traits	.075	34.17	
	0.	Constant	1.340	44.98	

* This multiple R is not significantly lower than the multiple R for 18 variables. It is significantly greater than zero at the .01 level of confidence.

[1] All F ratios for the reduced set of variables are significant at the .05 level of confidence. $F \geq 3.90$ for $p < .05$.

Table 5.9

Multiple Regression Analysis for Boys With

Standard Variables (Shrunken Multiple R)

Battery		Items	Regression Coefficient	F	Correlation with Y
I All Variables	1.	Low Aggressive Traits	.147	2.22	.75
R = .80	2.	KD Adjusted Score	-.010	1.05	.34
R^2 = .64	3.	Glueck 5-Factor	-.002	1.24	.41
d.f. = 174	4.	Glueck 4-Factor	-.002	1.71	.41
S.E. Est. = .30	5.	Situation Exercise I	-.030	0.57	.00
	6.	Situation Exercise II	.008	0.04	.06
	7.	Situation Exercise III	-.102	5.53	-.06
	8.	Situation Exercise IV	.045	1.06	.04
	10.	IQ	-.004	4.87	-.49
	11.	KD Area 1	.006	0.38	.26
	12.	KD Area 2	.022	5.38	.40
	13.	KD Area 3	.006	0.18	.22
	14.	KD Area 4	.006	0.14	.13
	15.	KD Area 5	.012	0.60	.24
	16.	KD Area 6	.009	0.43	.15
	17.	Trait Total	-.020	0.04	.77
	18.	Chronological Age	.002	3.56	.07
	19.	High Aggressive Traits	.093	0.88	.66
	0.	Constant	.856	0.22	
II Reduced Set[1]:	1.	Low Aggressive Traits	.131	66.63	
R = .80	7.	Situation Exercise III	-.086	5.95	
R^2 = .64	10.	IQ	-.004	5.06	
d.f. = 186	12.	KD Area 2	.019	7.66	
S.E. Est. = .29	18.	Chronological Age	.003	7.73	
	19.	High Aggressive Traits	.074	23.73	
	0.	Constant	1.106	8.95	

* This multiple R is not significantly lower than the multiple R for 18 variables. It is significantly greater than zero at the .01 level of confidence.

1 All F ratios for the reduced set of variables are significant at the .05 level of confidence. $F \geq 3.90$ for $p < .05$

Table 5.10

Multiple Regression Analysis for Girls With Standard Variables (Shrunken Multiple R)

Battery		Items	Regression Coefficient	F	Correlation with Y
I All Variables:	1.	Low Aggressive Traits	-.411	1.54	.74
R = .78	2.	KD Adjusted Score	-.004	0.15	.16
R^2 = .61	3.	Glueck 5-Factor	.002	1.76	.25
d.f. = 174	4.	Glueck 4-Factor	-.002	1.01	.25
S.E. Est. = .31	5.	Situation Exercise I	.012	0.08	.09
	6.	Situation Exercise II	.046	0.89	.10
	7.	Situation Exercise III	.041	0.85	.01
	8.	Situation Exercise IV	-.066	1.70	.04
	10.	IQ	-.008	14.17	-.43
	11.	KD Area 1	-.003	0.07	.15
	12.	KD Area 2	.009	0.40	.10
	13.	KD Area 3	-.013	0.79	.06
	14.	KD Area 4	-.013	0.61	.19
	15.	KD Area 5	-.020	2.03	-.01
	16.	KD Area 6	.013	0.92	.19
	17.	Trait Total	.568	2.93	.75
	18.	Chronological Age	-.001	0.13	-.00
	19.	High Aggressive Traits	-.478	2.08	.63
	0.	Constant	.026	3.15	
II Reduced Set[1]:	10.	IQ	-.008	19.73	
R = .78*	17.	Trait Total	.125	208.17	
R^2 = .61	0.	Constant	.021	218.34	
d.f. = 190					
S.E. Est. = .31					

* This multiple R is not significantly lower than the multiple R for 18 variables. It is significantly greater than zero at the .01 level of confidence.

[1] All F ratios for the reduced set of variables are significant at the .05 level of confidence. F 3.89 for $p < .05$.

Chapter 6

Comparison of Interview Data Obtained in Two Communities

Introduction

In Phase II of this study, the researchers felt it important and necessary to make inter-community comparisons between the populations evaluated in the Eau Claire County Youth Study and the Flint Youth Study. Inasmuch as girls were not included for study at Flint, the comparisons will be restricted to those involving boys. Flint represents a large urban population (approximately 200,000 population) and Eau Claire mainly a rural and small urban population (approximately 40,000 in the city of Eau Claire and 20,000 in the rest of Eau Claire County). The juxtaposition of certain of the findings derived from the study of these two populations would provide some data bearing upon the following question: In what ways were the Flint boys different from or similar to their Eau Claire counterparts in terms of circumstance, behavior, and point of view? While the interested reader could make these comparisons by reading the reports describing these studies, it seemed worthwhile to bring certain of these findings together in this one section and to comment on their possible significance. The differences and similarities discussed in this chapter should reveal some of the universal and the unique factors which influence the development of an individual and consequently our understanding of him.

The material of this section is the end product of research evidence subjected to several selective factors. In the Eau Claire County Youth Study, Phase I, the interviews with the child, mother, and father consisted of 60, 35, and 37 items respectively (Thurston, Feldhusen, and Benning, 1964). Results were not reported for all these items because of space limitations and

lack of significance. In the final report, emphasis was placed on those findings which appeared to be related to the primary independent variable of that study, approved and disapproved behavioral status in the classroom. Some attention was also given to that data which appeared to be important relative to the secondary independent variables: location, sex, and grade level.

The number of interview questionnaire items reported in the final report were 23, 19, and 16 for child, mother, and father respectively, 58 in all. Those potentially significant areas provided the basis for a comparison with the Flint Youth Study. These 58 scores were further pared down by statistical and methodological considerations. In 38 instances, differences between the two research studies in accumulating and recording data introduced complicating features which precluded meaningful treatment of the results. The elimination of these 38 scores from consideration left 20 scores remaining, 5 child, 9 mother, and 6 father. These are the areas which constitute the primary basis for this comparison of the Flint-Eau Claire findings. It must be remembered that subtle differences between the two interview situations may account for some of the variance which is observed. This could involve differential training of the interviewer, differing orientation for the data gatherers, and many other variables.

The data of this chapter are presented in both percentage and numerical form with no attempt made to ascertain the statistical significance of differences. When differences and similarities are cited, the reader is urged to remember that these are suggested to provide the basis for formulating hypotheses. As in any circumstance such as this, the reader is encouraged to share the researcher's cautious attitudes regarding the tentative findings, interpretations, and conclusions. Discussion of the comparisons and their

implications will be minimal. The data are presented in detailed form to supply the interested reader with information bearing upon specific ideas and hypotheses which he may wish to evaluate. Verification of the ideas generated in this fashion must of necessity await additional research.

To simplify the presentation of the material of this chapter, dealing with the Flint-Eau Claire comparisons, certain liberties have been taken with some of the terms describing groups and the grammar involved in the comparisons: 1) Mothers of approved boys, mothers of disapproved boys, fathers of approved boys, and fathers of disapproved boys will be referred to as approved mothers, disapproved mothers, approved fathers, and disapproved fathers, respectively. 2) Since all comparisons involve only the Flint, Michigan, and Eau Claire, Wisconsin, populations, the second reference will sometimes be omitted. For example, in a statement such as "The approved Eau Claire boys were more positive in their relation to adults," "more positive" means "more positive than the approved Flint boys."

The results of these comparisons will be presented in two parts. Part A will be confined to the 20 inter-community comparisons involving variables which were found to be related to classroom behavior in the Eau Claire County Youth Study. Part B will describe 18 variables which appeared to be of some interest in relationship to the Flint-Eau Claire comparisons, although they were not found to be related to approved and disapproved behavior in Eau Claire.

To further facilitate the treatment of these data, the comparisons, when feasible, are grouped into six psycho-social areas: 1) community and neighborhood, 2) family structure and interaction patterns, background, siblings, 3) family or parental control, 4) school and church relations, 5) identifications, models, goals, and aims, and 6) peer relations.

Results, Part A

Twenty Inter-Community Comparisons of Factors Related to Classroom Behavior

Community and Neighborhood

Inspection of Table 6.1 would suggest that the mothers in both Flint and Eau Claire were quite positive in their attitudes toward their communities. This was somewhat more noticeable in the approved mothers as opposed to the disapproved mothers. But even the disapproved mothers, in general, had positive feelings about the city in which they lived. The reported self-satisfaction with the community was more apparent in Eau Claire than Flint.

In Table 6.2, it was of interest to note that many mothers in both communities indicated they held no real opinion about the effectiveness of the way in which youngsters who got into trouble were handled. The disapproved mothers in both communities were more likely to have definite opinions in this area. Eau Claire rural disapproved mothers expressed more dissatisfaction with the facilities than the Flint mothers or the other Eau Claire mothers.

Family structure and interaction patterns, backgrounds, and siblings

Table 6.3 indicates that Eau Claire boys were much less likely to view their parents as inconsistent or falling down most of the time in their response to the question, "Do your parents behave the way they want you to behave?"

There appeared to be a slight tendency for approved mothers in Eau Claire to marry earlier than those in Flint (Table 6.4). There was no evidence of such a relationship in the disapproved mothers of these communities.

On the basis of evidence presented in Table 6.5, it can be seen that more parents in Eau Claire reported that the current marriage was their only one.

Tables 6.6 and 6.7 indicate that the parents of Eau Claire boys were more likely to have grown up on a farm, in town or a small city while the Flint parents were more likely to have grown up in a large city. In short, it would appear that the parents were generally residing in the same type of community in which they were raised. There was, however, evidence of movement in an urban direction. Well over half of the Flint parents had been raised on the farm or in a small community while only rarely had an Eau Claire parent come from a large city.

From the results of Table 6.8, it would appear that Flint fathers spent less time with their sons. The approved parents, generally, spent more time with the boys than disapproved parents.

Family or parental control

More Eau Claire mothers expressed a belief that parents can wield a great deal of influence in raising children. In both communities, approved parents were more apt to feel that they had this influence (Table 6.9).

The spare time activities of Flint mothers were more likely to involve mind-broadening and creative activities (Table 6.10). Approved mothers spent more time with mind-broadening activities than did the disapproved mothers. Eau Claire mothers indicated that their main interests centered around the home and doing things with their families.

Rural mothers spent more of this time working around the home than either of their urban counterparts (Table 6.10).

The Flint fathers appeared (Table 6.11) to spend more of their spare time in mind-broadening and creative activities than did the Eau Claire fathers,

with the latter more inclined to work around home during leisure time or do nothing at all. Similar relationships were noted in the case of the mothers (Table 6.10). Both approved and disapproved fathers reported spending a considerable amount of time engaging in enjoyable activities with their families.

From the results in Table 6.12, it would appear that the Eau Claire fathers were more likely than Flint fathers to report that they can influence their child's behavior a great deal. The Flint fathers were inclined to qualify their comments a bit in terms of what they can do or to indicate that they really can do very little. In general, this was consistent with the findings regarding mothers' beliefs in this area (Table 6.9). Also, the approved fathers generally felt that they can influence their child's behavior to a greater extent than do the disapproved fathers.

School and Church

In Table 6.13, the mothers' membership in organizations was explored. In general, it would seem that the Flint mothers tended more to report membership in school organizations and less so in church organizations than the Eau Claire mothers. More disapproved mothers reported that they belonged to no organization than did the approved.

The membership of fathers in organizations is presented in Table 6.14. A relationship similar to that of the mothers was noted, with Flint fathers tending more to belong to school organizations and less to church organizations. Also, more disapproved fathers reported no organizational membership than did the approved. More rural fathers reported no membership in organizations than did the urban.

On the basis of the findings revealed in Table 6.15, it can be seen that the Flint boys were more likely to attempt some resolution of difficulties with the teacher, either rationally or aggressively. Eau Claire boys were more inclined to react passively, either by avoiding the issue or by simply doing nothing. However, Eau Claire and Flint disapproved boys were more likely than their approved counterparts to "look mean, argue, get back at her, fight."

It would appear that the Eau Claire approved mothers were somewhat more inclined to believe that the church and school exert favorable influences on their children (Table 6.16). Flint mothers were more likely to mention youth organizations than Eau Claire mothers, generally.

Table 6.17 presents the results of the fathers' responses regarding influences upon their children. Inter-community differences involving school and church were not marked. Eau Claire fathers were more inclined to mention miscellaneous forces as formative factors influencing their child or else to have no answer while Flint fathers were more inclined to cite youth organizations.

Identifications, models, goals, aims

Responses to a question concerning the grownup which a boy would like to be like are reported in Table 6.18. Eau Claire boys were more inclined to choose their father as the model for themselves. Flint boys tended to select some male non-relative to serve in this capacity.

In their evaluations of adults (Table 6.19), Eau Claire boys were either favorable or neutral while Flint boys were more likely to be negative, or to offer neutral evaluations, or to offer no evaluation at all.

The findings of Table 6.20 involve comparisons of the boy-adult relationships. Eau Claire boys were more likely to report positive or neutral

relationships while Flint boys were more apt to indicate negative relationships or an absence of relationship. The disapproved Eau Claire boys, however, were as likely to report negative relationships with adults almost as often as the approved or disapproved boys from Flint.

Results, Part B

Eighteen Inter-Community Comparisons of Factors Unrelated to Classroom Behavior

Community and Neighborhood

There is some indication in Tables 6.21 and 6.22 that the Flint parents liked their community for economic and social reasons while the Eau Claire parents cited general aspects. While the parents, generally, felt positively about their communities, the Flint parents were more apt to express negative feelings when asked how they felt about their neighborhood (Tables 6.23 and 6.24).

Family structure and interaction patterns, backgrounds and siblings

Flint mothers were more often reported as working for pay and for longer amounts of time (Table 6.25). They were also more inclined to be working at times when their children were out of school (Table 6.26).

The Flint parents more often reported that they didn't have enough time to spend with their sons (Tables 6.27 and 6.28), and Flint boys tended to report spending less time with the father (Table 6.29). Flint mothers were more inclined to cite restrictions and expenses as being the least pleasant thing about having children while the Flint fathers mentioned worry and control problems more frequently (Tables 6.30 and 6.31). Flint parents were more likely to express disapproval or displeasure regarding their sons while the Eau Claire parents expressed a mixture of approval and disapproval more often (Tables 6.32 and 6.33). In a rating of the boys' parents concerning

their communication on matters related to the boy, it was found that Flint parents were less likely to talk things over (Table 6.34). With regard to the child-parent relationship, it was found that the Eau Claire boys were much more frequently rated as feeling close to their parents (Table 6.35).

Family or parental control

To the question, "About how often do you get punished for something?" Flint boys were more likely to indicate that they were hardly ever punished at all (Table 6.36), while Eau Claire boys more frequently reported that they were punished once a week or more often.

Flint ninth grade boys were more inclined to report that they had dates (Table 6.37). The Eau Claire boys more frequently reported no dates and offered such reasons as "father forbids," "mother is too strict," or "not interested."

Peer relations

Boys were asked, "Do you have a close friend?" Flint boys were less likely to indicate that they have close friends (Table 6.38). The Eau Claire urban children, approved and disapproved, were almost unanimous in reporting that they did have a close friend. However, only about sixty percent of the Flint boys reported having a close friend.

Discussion and Summary

One concept which might prove useful in discussing differences between these two communities would be that of "dilution of family life." Resources and individuals external to the home and family seemed more likely to be utilized or relied upon in Flint than in Eau Claire in the raising of children.

The Flint family appeared to be more economically and socially

orientated than the Eau Claire family. A greater proportion of Flint parents mentioned economic opportunities and social reasons as favorable aspects of the community. The Eau Claire parents stressed the loosely defined "general" aspects of small city or rural living. The Flint parents were more likely to indicate that they did not like the neighborhood in which they lived. More Flint mothers worked and those who did, worked for longer periods of time. The Flint mothers were more likely to be working when the boys were out of school. A larger percentage of mothers, but not fathers, cited "being tied down, expenses" as the least pleasant thing about having children.

Flint parents were more likely to work or to engage in social functions; consequently they had less time to spend within the home and with their children. Flint parents appeared to spend more of their leisure time outside of the home in mind-broadening or creative activities. Flint children, in general, reported spending less time with the father and as being punished less frequently than the Eau Claire children. Perhaps, partially as a consequence, Flint parents were less likely to report that they have enough time to talk with their child and to do things with him. The Flint parents were less likely to sit down and discuss their child and his problems. This may be a reflection of the belief which was more prevalent in Flint that parents cannot do much to influence their child in his growing up. They cited youth organizations as influential in this respect more often than did the parents from Eau Claire. The Flint mothers and fathers were also less likely to report approval of their child and more likely to express disapproval.

Flint children were less likely to report that their parents behaved in the way in which the child is supposed to behave. Perhaps related to this was the finding that Flint sons were less likely to select their fathers as

their models. Men outside the family were more often mentioned in this respect by the Flint children. Flint youngsters were also more often rated as feeling less close to their parents. The Flint boys reported having more dates but fewer of them had a close friend.

Flint parents were more likely to have been married previously. They were also more apt to have been brought up in a smaller community and then to have moved to Flint.

There was something of a differential between Flint and Eau Claire in terms of organizations to which parents belonged. Churches were more often cited by Eau Claire parents and school organizations by those from Flint.

The children of Flint appeared to be more inclined to act when they were angry at a teacher. Either aggressive or constructive resolutions of problems with teachers was more often reported. The Eau Claire children were more likely to be passive and to mention doing nothing when in similar circumstances. Perhaps this reluctance reflected the belief that they would encounter parental punishment or some other parental intervention if their school difficulties became too noticeable.

In this section of the study, an inter-community comparison was undertaken between the populations of Eau Claire County Youth Study and the Flint Youth Study. The differences and similarities noted in this comparison provided a basis for making known some of the universal and the unique factors which influence the development of an individual. In particular, the data might shed further light on the advantages and disadvantages of large city versus small city-rural life in relationship to the emergence of approved and disapproved classroom behavior.

References

1. Flint Youth Study. Progress Report on Analysis of Data from First Year of Field Work, Institute for Social Research, The University of Michigan, April, 1959.

2. Thurston, J. R.; Feldhusen, J. F.; and Benning, J. J. Classroom Behavior: Background Factors and Psycho-Social Correlates, State Department of Public Welfare, Madison, April 30, 1964.

3. Winter, J. Alan and Halsted, Donald L. Report on the Flint Youth Study, A Resource Book of Selected Findings, Institute for Social Research, The University of Michigan, January, 1961.

Table 6.1

Comparison of Flint and Eau Claire Interview Responses

Concerning the Community of Residence

Question: (Eau Claire Item-Mother 5, Flint Table 14) "How do you feel about living in .....?"

Response Options:

1. Positive attitude
2. Negative attitude
3. Neutral
4. No answer

Group	Response Frequencies 1	2	3	4
Flint Approved	81% (76)	9% (8)	7% (7)	3% (3)
E. C. Approved	89% (85)	3% (3)	8% (8)	0% (0)
E. C. Urban Approved	94% (45)	2% (1)	4% (2)	0% (0)
E. C. Rural Approved	83% (40)	4% (2)	13% (6)	0% (0)
Flint Disapproved	73% (66)	14% (13)	11% (10)	2% (2)
E. C. Disapproved	83% (79)	8% (8)	7% (7)	2% (2)
E. C. Urban Disapproved	88% (42)	8% (4)	2% (1)	2% (1)
E. C. Rural Disapproved	77% (37)	8% (4)	13% (6)	2% (1)

Table 6.2

Comparison of Flint and Eau Claire Interview Responses

Concerning Treatment of Child Offenders

Question: (Eau Claire Item-Mother 12, Flint Table 20) "When children get in trouble in ....., do you think it is handled in a good way?"

Response Options:

1. Yes
2. No
3. Don't know
4. No answer

Group	Response Frequencies 1	2	3	4
Flint Approved	38% (36)	12% (11)	49% (46)	1% (1)
E. C. Approved	53% (51)	7% (7)	38% (36)	2% (2)
E. C. Urban Approved	61% (29)	4% (2)	33% (16)	2% (1)
E. C. Rural Approved	46% (22)	10% (5)	42% (20)	2% (1)
Flint Disapproved	47% (43)	15% (14)	29% (26)	9% (8)
E. C. Disapproved	49% (47)	22% (21)	26% (25)	3% (3)
E. C. Urban Disapproved	58% (28)	19% (9)	19% (9)	4% (2)
E. C. Rural Disapproved	40% (19)	25% (12)	33% (16)	2% (1)

Table 6.3

Comparison of Flint and Eau Claire Interview Responses

of Children Concerning Parents

Question: (Eau Claire Item-Child 16, Flint Table 53) "Do your parents behave the way they want you to behave?"

Response Options:

1. Always do what they expect me to
2. Sometimes they fall down a bit
3. Inconsistent or fall down most of the time
4. No answer

Group	Response Frequencies 1	2	3	4
Flint Approved	45% (43)	25% (24)	27% (26)	3% (3)
E. C. Approved	72% (69)	25% (24)	1% (1)	2% (2)
E. C. Urban Approved	77% (37)	21% (10)	2% (1)	0% (0)
E. C. Rural Approved	67% (32)	29% (14)	0% (0)	4% (2)
Flint Disapproved	39% (37)	29% (28)	29% (28)	2% (2)
E. C. Disapproved	68% (65)	22% (21)	6% (6)	4% (4)
E. C. Urban Disapproved	67% (32)	23% (11)	6% (3)	4% (2)
E. C. Rural Disapproved	69% (33)	21% (10)	6% (3)	4% (2)

Table 6.4

Comparison of Flint and Eau Claire Interview Responses

Concerning Mother's Age at Time of Marriage

Question: (Eau Claire Item-Mother 20, Flint Table 37a) "How old were you at time of marriage?"

Response Options:

1. 18 to 20 years
2. 21 to 26 years
3. 27 to 34 years
4. 35 to 45 years
5. No answer

Group	Response Frequencies 1	2	3	4	5
Flint Approved	27% (25)	46% (43)	14% (13)	3% (3)	10% (10)
E. C. Approved	41% (39)	48% (46)	10% (10)	1% (1)	0% (0)
E. C. Urban Approved	40% (19)	50% (24)	10% (5)	0% (0)	0% (0)
E. C. Rural Approved	42% (20)	46% (22)	10% (5)	2% (1)	0% (0)
Flint Disapproved	55% (49)	26% (24)	4% (4)	2% (2)	13% (12)
E. C. Disapproved	54% (51)	30% (29)	9% (9)	5% (5)	2% (2)
E. C. Urban Disapproved	53% (25)	33% (16)	4% (2)	8% (4)	2% (1)
E. C. Rural Disapproved	54% (26)	27% (13)	15% (7)	2% (1)	2% (1)

Table 6.5

Comparison of Flint and Eau Claire Interview Responses

Concerning Marital History of Parents

Question: (Eau Claire Item-Mother 2, Flint Table 5) "Is this only marriage?"
Response Options:

1. Yes, both husband & wife
2. No, both husband & wife
3. Yes, for one parent; no for other
4. No answer, don't know

Group	Response Frequencies 1	2	3	4
Flint Approved	71% (67)	11% (10)	12% (11)	6% (6)
E. C. Approved	93% (89)	2% (2)	5% (5)	0% (0)
E. C. Urban Approved	92% (44)	2% (1)	6% (3)	0% (0)
E. C. Rural Approved	94% (45)	2% (1)	4% (2)	0% (0)
Flint Disapproved	67% (61)	11% (10)	12% (11)	10% (9)
E. C. Disapproved	83% (79)	4% (4)	11% (11)	2% (2)
E. C. Urban Disapproved	84% (40)	4% (2)	8% (4)	4% (2)
E. C. Rural Disapproved	81% (39)	4% (2)	15% (7)	0% (0)

Table 6.6

Comparison of Flint and Eau Claire Interview Responses

Concerning Where Mother Grew Up

Question: (Eau Claire Item-Mother 4, Flint Table 11) "Did you grow up on a farm, in a small town, or in the city?"

Response Options:

1. Rural
2. Town under 10,000 population
3. City - 10,000 to 50,000 population
4. Large city
5. No answer

Group	Response Frequencies 1	2	3	4	5
Flint Approved	32% (30)	20% (19)	13% (12)	35% (33)	0% (0)
E. C. Approved	47% (45)	26% (25)	24% (23)	3% (3)	0% (0)
E. C. Urban Approved	29% (14)	19% (9)	46% (22)	6% (3)	0% (0)
E. C. Rural Approved	65% (31)	33% (16)	2% (1)	0% (0)	0% (0)
Flint Disapproved	27% (25)	15% (14)	8% (7)	43% (39)	7% (6)
E. C. Disapproved	49% (47)	17% (16)	29% (28)	2% (2)	3% (3)
E. C. Urban Disapproved	31% (15)	23% (11)	40% (19)	2% (1)	4% (2)
E. C. Rural Disapproved	67% (32)	10% (5)	19% (9)	2% (1)	2% (1)

Table 6.7

Comparison of Flint and Eau Claire Interview Responses

Concerning Where Father Grew Up

Question: (Eau Claire Item-Father 6, Flint Table 11) "Did you grow up on a farm, in a small town, or in the city?"

Response Options:

1. Rural
2. Town under 10,000 population
3. City-10,000 to 50,000 population
4. Large city
5. No answer

Group	Response Frequencies 1	2	3	4	5
Flint Approved	34% (29)	19% (16)	10% (9)	36% (31)	1% (1)
E. C. Approved	51% (49)	19% (18)	18% (17)	4% (4)	8% (8)
E. C. Urban Approved	21% (10)	28% (13)	33% (16)	8% (4)	10% (5)
E. C. Rural Approved	82% (39)	10% (5)	2% (1)	0% (0)	6% (3)
Flint Disapproved	27% (21)	25% (20)	13% (10)	29% (23)	6% (5)
E. C. Disapproved	58% (55)	9% (9)	25% (24)	2% (2)	6% (6)
E. C. Urban Disapproved	35% (17)	8% (4)	45% (21)	2% (1)	10% (5)
E. C. Rural Disapproved	80% (38)	10% (5)	6% (3)	2% (1)	2% (1)

Table 6.8

Comparison of Flint and Eau Claire Interview Responses

Concerning Time at Home With Child

Question: (Eau Claire Item-Father 18, Flint Table 26) "When are you and your child generally home at the same time?"

Response Options:

1. Most or all time child is home
2. Evenings, week-ends
3. Some evenings, part of week-end
4. Just Sundays or week-ends
5. Never, No answer, other

Group	Response Frequencies 1	2	3	4	5
Flint Approved	3% (3)	42% (36)	35% (30)	8% (7)	12% (10)
E. C. Approved	9% (9)	63% (60)	16% (15)	4% (4)	8% (8)
E. C. Urban Approved	8% (4)	55% (26)	23% (11)	4% (2)	10% (5)
E. C. Rural Approved	10% (5)	72% (34)	8% (4)	4% (2)	6% (3)
Flint Disapproved	4% (3)	43% (34)	14% (11)	26% (21)	13% (10)
E. C. Disapproved	8% (8)	49% (47)	24% (23)	6% (6)	13% (12)
E. C. Urban Disapproved	0% (0)	52% (25)	23% (11)	10% (5)	15% (7)
E. C. Rural Disapproved	17% (8)	46% (22)	25% (12)	2% (1)	10% (5)

Table 6.9

Comparison of Flint and Eau Claire Interview Responses

Concerning Parent's Evaluation of Parental

Influence on Child

Question: (Eau Claire Item-Mother 13, Flint Table 21) "How much do you think a parent can influence how his child will grow up these days?"

Response Options:

1. Great amount of influence, majority
2. Qualified
3. Very little
4. Depends on parents or situation
5. Miscellaneous or no answer

Group	Response Frequencies 1	2	3	4	5
Flint Approved	52% (49)	18% (17)	4% (4)	17% (16)	9% (8)
E. C. Approved	93% (89)	3% (3)	2% (2)	2% (2)	0% (0)
E. C. Urban Approved	96% (46)	2% (1)	0% (0)	2% (1)	0% (0)
E. C. Rural Approved	90% (43)	4% (2)	4% (2)	2% (1)	0% (0)
Flint Disapproved	52% (47)	20% (18)	6% (6)	12% (11)	10% (9)
E. C. Disapproved	76% (73)	14% (13)	6% (6)	2% (2)	2% (2)
E. C. Urban Disapproved	81% (39)	13% (6)	2% (1)	2% (1)	2% (1)
E. C. Rural Disapproved	71% (34)	15% (7)	10% (5)	2% (1)	2% (1)

Table 6.10

Comparison of Flint and Eau Claire Interview Responses

Concerning Spare Time Activities of Mother

Question: (Eau Claire Item-Mother 18, Flint Table 28) "What other things do you do with your spare time?"

Response Options:

1. Functional, home relevant activity
2. Mind-broadening activity
3. Enjoyable activity with family
4. Enjoyable activity not with family
5. Creative activities
6. No leisure activities, no answer

Group	Response Frequencies 1	2	3	4	5	6
Flint Approved	28% (46)	31% (51)	12% (20)	13% (22)	12% (21)	2% (3)
E. C. Approved	30% (54)	24% (45)	24% (45)	15% (28)	3% (6)	4% (7)
E. C. Urban Approved	23% (22)	25% (24)	29% (28)	15% (15)	4% (4)	4% (4)
E. C. Rural Approved	37% (32)	24% (21)	19% (17)	15% (13)	2% (2)	3% (3)
Flint Disapproved	22% (33)	24% (36)	25% (37)	11% (16)	11% (16)	6% (9)
E. C. Disapproved	36% (59)	15% (24)	21% (34)	16% (26)	8% (14)	4% (7)
E. C. Urban Disapproved	31% (29)	14% (13)	24% (23)	20% (19)	10% (9)	1% (1)
E. C. Rural Disapproved	43% (30)	16% (11)	16% (11)	10% (7)	7% (5)	8% (6)

Table 6.11

Comparison of Flint and Eau Claire Interview Responses

Concerning Spare Time Activities of Father

Question: (Eau Claire Item-Father 20, Flint Table 28) "What other things do you do with your spare time?"

Response Options:

1. Functional, home relevant activity
2. Mind-broadening activity
3. Enjoyable activity with family
4. Enjoyable activity, not with family
5. Creative activities
6. No leisure activities or no answer

Group	Response Frequencies 1	2	3	4	5	6
Flint Approved	16% (24)	18% (26)	26% (39)	23% (34)	15% (22)	2% (3)
E. C. Approved	20% (35)	6% (10)	35% (60)	26% (44)	2% (4)	11% (19)
E. C. Urban Approved	24% (24)	6% (6)	32% (32)	25% (25)	4% (4)	9% (9)
E. C. Rural Approved	15% (11)	6% (4)	39% (28)	26% (19)	0% (0)	14% (10)
Flint Disapproved	7% (9)	11% (19)	35% (46)	31% (41)	10% (14)	3% (4)
E. C. Disapproved	18% (25)	4% (5)	35% (48)	28% (39)	2% (3)	13% (18)
E. C. Urban Disapproved	18% (13)	1% (1)	34% (25)	31% (23)	3% (2)	13% (10)
E. C. Rural Disapproved	19% (12)	6% (4)	36% (23)	25% (16)	1% (1)	13% (8)

Table 6.12

Comparison of Flint and Eau Claire Interview Responses

Concerning Parent's Evaluation of Parental

Influence on Child

Question: (Eau Claire Item-Father 17, Flint Table 21) "How much do you think a parent can influence how his child will grow up these days?"

Response Options:
1. Great amount of influence, majority
2. Qualified
3. Very little
4. Depends on parent or situation
5. Miscellaneous or no answer

Group	Response Frequencies 1	2	3	4	5
Flint Approved	59% (49)	15% (13)	5% (4)	15% (13)	6% (5)
E. C. Approved	80% (76)	8% (8)	1% (1)	2% (2)	9% (9)
E. C. Urban Approved	84% (40)	4% (2)	0% (0)	2% (1)	10% (5)
E. C. Rural Approved	75% (36)	13% (6)	2% (1)	2% (1)	8% (4)
Flint Disapproved	46% (36)	16% (13)	10% (8)	14% (11)	14% (11)
E. C. Disapproved	66% (63)	17% (16)	8% (8)	3% (3)	6% (6)
E. C. Urban Disapproved	75% (36)	7% (3)	4% (2)	4% (2)	10% (5)
E. C. Rural Disapproved	56% (27)	27% (13)	13% (6)	2% (1)	2% (1)

Table 6.13

Comparison of Flint and Eau Claire Interview Responses

Concerning Club or Organization Memberships

of Mother

Question: (Eau Claire Item-Mother 17, Flint Table 27) "Are you a member of any club or organization?"

Response Options:

1. Social clubs
2. Church organizations
3. School organizations
4. Other organizations
5. No organization membership or no answer

Group	Response Frequencies 1	2	3	4	5
Flint Approved	12% (17)	18% (25)	45% (62)	13% (18)	12% (17)
E. C. Approved	13% (23)	34% (61)	24% (42)	18% (31)	11% (20)
E. C. Urban Approved	17% (17)	32% (33)	26% (26)	18% (18)	7% (7)
E. C. Rural Approved	8% (6)	37% (28)	21% (16)	17% (13)	17% (13)
Flint Disapproved	5% (7)	20% (25)	40% (51)	12% (15)	23% (30)
E. C. Disapproved	15% (21)	25% (37)	25% (37)	14% (20)	21% (31)
E. C. Urban Disapproved	12% (9)	28% (20)	28% (20)	12% (9)	20% (14)
E. C. Rural Disapproved	16% (12)	23% (17)	23% (17)	15% (11)	23% (17)

Table 6.14

Comparison of Flint and Eau Claire Interview Responses

Concerning Club or Organization Memberships

of Father

Question: (Eau Claire Item-Father 19, Flint Table 27) "Are you a member of any club or organization?"

Response Options:

1. Social clubs
2. Church organizations
3. School organizations
4. Other organizations
5. No organization membership or no answer

Group	Response Frequencies 1	2	3	4	5
Flint Approved	20% (26)	11% (14)	30% (40)	24% (32)	15% (20)
Eau Claire Approved	20% (28)	17% (24)	9% (13)	30% (43)	24% (35)
E. C. Urban Approved	25% (19)	20% (15)	9% (7)	28% (21)	18% (14)
E. C. Rural Approved	13% (9)	13% (9)	9% (6)	33% (22)	32% (21)
Flint Disapproved	19% (21)	6% (7)	25% (27)	21% (23)	28% (30)
E. C. Disapproved	18% (21)	10% (13)	8% (10)	32% (41)	32% (41)
E. C. Urban Disapproved	19% (12)	8% (5)	8% (5)	37% (24)	28% (18)
E. C. Rural Disapproved	15% (9)	13% (8)	8% (5)	27% (17)	37% (23)

Table 6.15

Comparison of Flint and Eau Claire Interview Responses

Concerning Anger of Child at Teacher

Question: (Eau Claire Item-Child 20, Flint Study 57) "When you are angry at a teacher, what do you do?"

Response Options:

1. Talk it over, try to understand, keep my temper
2. Ignore it, avoid her, leave
3. Look mean, argue, get back at her, fight
4. Do nothing
5. Other, no answer

Group	Response Frequencies 1	2	3	4	5
Flint Approved	33% (32)	5% (5)	23% (22)	19% (18)	20% (19)
E. C. Approved	9% (9)	11% (11)	6% (6)	53% (50)	21% (20)
E. C. Urban Approved	6% (3)	8% (4)	4% (2)	57% (27)	25% (12)
E. C. Rural Approved	12% (6)	15% (7)	8% (4)	48% (23)	17% (8)
Flint Disapproved	25% (24)	11% (11)	34% (32)	17% (16)	13% (12)
E. C. Disapproved	8% (8)	11% (11)	29% (28)	39% (37)	13% (12)
E. C. Urban Disapproved	8% (4)	10% (5)	29% (14)	40% (19)	13% (6)
E. C. Rural Disapproved	8% (4)	13% (6)	29% (14)	37% (18)	13% (6)

Table 6.16

Comparison of Flint and Eau Claire Interview Responses

by Mother Concerning Influences on Children

Question: (Eau Claire Item-Mother 10, Flint Table 18) "What else besides the family has a favorable influence on your child?"

Response Options:

1. Church
2. School
3. Youth Organizations
4. Relatives, associates
5. Miscellaneous, No answer

Group	Response Frequencies 1	2	3	4	5
Flint Approved	26% (42)	29% (46)	18% (28)	20% (32)	7% (12)
E. C. Approved	36% (80)	31% (67)	9% (19)	15% (33)	9% (19)
E. C. Urban Approved	34% (39)	28% (32)	11% (13)	16% (18)	11% (12)
E. C. Rural Approved	39% (41)	34% (35)	6% (6)	14% (15)	7% (7)
Flint Disapproved	27% (39)	21% (31)	21% (30)	18% (26)	13% (18)
E. C. Disapproved	31% (62)	30% (60)	16% (32)	17% (33)	6% (12)
E. C. Urban Disapproved	26% (27)	31% (31)	20% (21)	17% (18)	6% (6)
E. C. Rural Disapproved	36% (35)	30% (29)	12% (11)	16% (15)	6% (6)

Table 6.17

Comparison of Flint and Eau Claire Interview Responses

by Fathers Concerning Influences on Children

Question: (Eau Claire Item-Father 14, Flint Table 18) "What else besides the family has a favorable influence on your child?"

Response Options:

1. Church
2. School
3. Youth organizations
4. Relatives, associates
5. Miscellaneous or no answer

Group	Response Frequencies 1	2	3	4	5
Flint Approved	34% (51)	30% (46)	13% (20)	19% (29)	4% (6)
E. C. Approved	28% (52)	27% (51)	9% (16)	20% (36)	16% (29)
E. C. Urban Approved	26% (26)	27% (27)	10% (10)	20% (20)	17% (17)
E. C. Rural Approved	31% (26)	29% (24)	7% (6)	19% (16)	14% (12)
Flint Disapproved	19% (25)	27% (37)	30% (40)	18% (24)	6% (9)
E. C. Disapproved	26% (45)	28% (50)	14% (24)	16% (28)	16% (28)
E. C. Urban Disapproved	25% (22)	27% (23)	14% (12)	15% (13)	19% (16)
E. C. Rural Disapproved	26% (23)	31% (27)	13% (12)	17% (15)	13% (12)

Table 6.18

Comparison of Flint and Eau Claire Interview Responses

Concerning Preference of Grown-up

Question: (Eau Claire Item-Child 15, Flint Table 52) "Think of the grown-ups you know. When you grow up, which one would you most like to be like?"

Response Options:

1. Father
2. Male relative
3. Male, unrelated
4. Boy friend or brother
5. Mother or other female figure
6. No answer

Group	Response Frequencies 1	2	3	4	5	6
Flint Approved	24% (23)	24% (23)	38% (37)	6% (6)	3% (3)	4% (4)
E. C. Approved	48% (46)	14% (13)	16% (15)	2% (2)	9% (9)	11% (11)
E. C. Urban Approved	44% (21)	19% (9)	15% (7)	0% (0)	10% (5)	12% (6)
E. C. Rural Approved	53% (25)	8% (4)	17% (8)	4% (2)	8% (4)	10% (5)
Flint Disapproved	22% (21)	18% (17)	42% (40)	12% (11)	1% (1)	5% (5)
E. C. Disapproved	33% (32)	17% (16)	22% (21)	6% (6)	9% (9)	13% (12)
E. C. Urban Disapproved	33% (16)	19% (9)	25% (12)	2% (1)	8% (4)	13% (6)
E. C. Rural Disapproved	33% (16)	15% (7)	19% (9)	10% (5)	10% (5)	13% (6)

Table 6.19

Comparison of Flint and Eau Claire Interview Responses

Concerning Child's Evaluation of Adults

Question: (Eau Claire Item-Child 14, Flint Table 51) Evaluation of adults (standards and ethics, non-relations to kids).

Response Options:

1. Good, reliable, right, mostly good
2. Mixed bad and good, more bad than good
3. Neutral, just different
4. No evaluation, no answer

Group	Response Frequencies 1	2	3	4
Flint Approved	45% (43)	19% (18)	4% (4)	32% (31)
E. C. Approved	75% (72)	7% (7)	14% (13)	4% (4)
E. C. Urban Approved	86% (41)	6% (3)	6% (3)	2% (1)
E. C. Rural Approved	65% (31)	8% (4)	21% (10)	6% (3)
Flint Disapproved	32% (30)	24% (23)	2% (2)	42% (40)
E. C. Disapproved	54% (52)	21% (20)	16% (15)	9% (9)
E. C. Urban Disapproved	65% (31)	17% (8)	6% (3)	12% (6)
E. C. Rural Disapproved	44% (21)	25% (12)	25% (12)	6% (3)

Table 6.20

Comparison of Flint and Eau Claire Interview Responses

Concerning Child's Thoughts About Grown-ups

Question: (Eau Claire Item-Child 13, Flint Table 50) "Tell me as many things about grown-ups as you can think of."

Response Options:

1. Positive relationship with adults implied
2. Ambivalent negative and positive relationship implied
3. Strongly negative relationship
4. Neutral non-evaluative relationship
5. No relationship implied
6. No answer

Group	Response Frequencies 1	2	3	4	5	6
Flint Approved	26% (25)	22% (21)	11% (11)	7% (7)	32% (31)	1% (1)
E. C. Approved	53% (51)	25% (24)	1% (1)	17% (16)	4% (4)	0% (0)
E. C. Urban Approved	59% (28)	25% (12)	0% (0)	10% (5)	6% (3)	0% (0)
E. C. Rural Approved	48% (23)	25% (12)	2% (1)	23% (11)	2% (1)	0% (0)
Flint Disapproved	17% (16)	32% (30)	17% (16)	4% (4)	29% (28)	1% (1)
E. C. Disapproved	41% (39)	21% (20)	14% (14)	16% (15)	7% (7)	1% (1)
E. C. Urban Disapproved	42% (20)	23% (11)	17% (8)	10% (5)	8% (4)	0% (0)
E. C. Rural Disapproved	40% (19)	19% (9)	12% (6)	21% (10)	6% (3)	2% (1)

Table 6.21

Comparison of Flint and Eau Claire Interview Responses

of Mother Concerning Reactions to the Community

uestion: (Eau Claire Item-Mother 7, Flint Table 16) "What do you like about.....?"

esponse Options:

1. Resources for youth
2. Economic reasons
3. Social reasons
4. Adult programs, institutional services
5. General aspects of town
6. Other, no answer

Group	Response Frequencies 1	2	3	4	5	6
Flint Approved	24% (34)	16% (22)	33% (46)	8% (11)	11% (16)	9% (12)
E. C. Approved	20% (27)	8% (11)	15% (20)	8% (11)	41% (55)	8% (11)
E. C. Urban Approved	27% (20)	5% (4)	12% (9)	11% (8)	39% (29)	6% (5)
E. C. Rural Approved	12% (7)	12% (7)	18% (11)	5% (3)	43% (26)	10% (6)
Flint Disapproved	18% (23)	18% (23)	33% (43)	8% (11)	16% (21)	7% (9)
E. C. Disapproved	14% (18)	6% (8)	18% (23)	8% (10)	40% (50)	14% (18)
E. C. Urban Disapproved	11% (8)	3% (2)	20% (14)	9% (6)	46% (32)	11% (8)
E. C. Rural Disapproved	17% (10)	11% (6)	16% (9)	7% (4)	32% (18)	17% (10)

Table 6.22

Comparison of Flint and Eau Claire Interview Responses

of Father Concerning Reactions to the Community

Question: (Eau Claire Item-Father 11, Flint Table 16) "What do you like about .....?"

Response Options:

1. Resources for youth
2. Economic reasons
3. Social reasons
4. Adult programs, institutional services
5. General aspects of town
6. Other or no answer

Group	Response Frequencies 1	2	3	4	5	6
Flint Approved	10% (13)	36% (46)	24% (31)	11% (14)	14% (18)	5% (7)
E. C. Approved	11% (15)	10% (14)	13% (17)	5% (7)	36% (47)	25% (34)
E. C. Urban Approved	14% (11)	9% (7)	14% (11)	6% (5)	35% (26)	22% (17)
E. C. Rural Approved	7% (4)	12% (7)	11% (6)	4% (2)	37% (21)	29% (17)
Flint Disapproved	14% (17)	40% (47)	16% (19)	7% (8)	17% (20)	6% (7)
E. C. Disapproved	9% (11)	20% (25)	9% (11)	2% (3)	35% (42)	25% (30)
E. C. Urban Disapproved	12% (8)	10% (7)	9% (6)	3% (2)	39% (27)	27% (19)
E. C. Rural Disapproved	6% (3)	34% (18)	9% (5)	2% (1)	28% (15)	21% (11)

Table 6.23

Comparison of Flint and Eau Claire Interview Responses of Mothers Concerning the Neighborhood

Question: (Eau Claire Item-Mother 6, Flint Table 15) "How do you feel about living in this neighborhood?"

Response Options:

1. Positive
2. Negative
3. Neutral
4. No answer

Group	Response Frequencies 1	2	3	4
Flint Approved	78% (73)	15% (14)	3% (3)	4% (4)
E. C. Approved	82% (78)	8% (8)	10% (10)	0% (0)
E. C. Urban Approved	86% (41)	6% (3)	8% (4)	0% (0)
E. C. Rural Approved	77% (37)	10% (5)	13% (6)	0% (0)
Flint Disapproved	73% (66)	20% (18)	3% (3)	4% (4)
E. C. Disapproved	79% (75)	9% (9)	10% (10)	2% (2)
E. C. Urban Disapproved	82% (39)	6% (3)	10% (5)	2% (1)
E. C. Rural Disapproved	75% (36)	13% (6)	10% (5)	2% (1)

Table 6.24

Comparison of Flint and Eau Claire Interview Responses

of Fathers Concerning the Neighborhood

Question: (Eau Claire Item-Father 10, Flint Table 15) "How do you feel about living in this neighborhood?"

Response Options:

1. Positive
2. Negative
3. Neutral
4. No answer

Group	Response Frequencies 1	2	3	4
Flint Approved	81% (70)	10% (9)	5% (4)	3% (3)
E. C. Approved	75% (71)	6% (6)	11% (11)	8% (8)
E. C. Urban Approved	71% (34)	6% (3)	13% (6)	10% (5)
E. C. Rural Approved	78% (37)	6% (3)	10% (5)	6% (3)
Flint Disapproved	81% (64)	13% (10)	6% (5)	0% (0)
E. C. Disapproved	68% (65)	7% (7)	19% (18)	6% (6)
E. C. Urban Disapproved	61% (29)	8% (4)	21% (10)	10% (5)
E. C. Rural Disapproved	75% (36)	6% (3)	17% (8)	2% (1)

Table 6.25

Comparison of Flint and Eau Claire Interview Responses

Concerning Amount of Mother's Employment

Outside of the Home

Question: (Eau Claire Item-Mother 14, Flint Table 23) "Do you do any part-time or full-time work for pay?"

Response Options:

1. Full time (32-40 hours a week)
2. Part time (1-23 hours a week)
3. Do not work
4. No answer, other

Group	Response Frequencies 1	2	3	4
Flint Approved	20% (19)	15% (14)	62% (58)	3% (3)
E. C. Approved	14% (13)	14% (13)	69% (67)	3% (3)
E. C. Urban Approved	15% (7)	17% (8)	66% (32)	2% (1)
E. C. Rural Approved	13% (6)	10% (5)	73% (35)	4% (2)
Flint Disapproved	41% (37)	9% (8)	47% (43)	3% (3)
E. C. Disapproved	18% (17)	16% (15)	61% (59)	5% (5)
E. C. Urban Disapproved	21% (10)	21% (10)	54% (26)	4% (2)
E. C. Rural Disapproved	15% (7)	10% (5)	69% (33)	6% (3)

Table 6.26

Comparison of Flint and Eau Claire Interview Responses

Concerning Time of Mother's Employment

Outside of the Home

Question: (Eau Claire Item-Mother 16, Flint Table 25) "What is your schedule of working hours away from home?"

Response Options:

1. After school time, or part of after school time
2. During school time or work at home
3. Irregular or hours
4. No work, no answer

Group	Response Frequencies 1	2	3	4
Flint Approved	14% (13)	15% (14)	6% (6)	65% (61)
E. C. Approved	6% (6)	15% (14)	7% (7)	72% (69)
E. C. Urban Approved	8% (4)	17% (8)	8% (4)	67% (32)
E. C. Rural Approved	4% (2)	13% (6)	6% (3)	77% (37)
Flint Disapproved	27% (25)	18% (16)	7% (6)	48% (44)
E. C. Disapproved	6% (6)	23% (22)	6% (6)	65% (62)
E. C. Urban Disapproved	8% (4)	25% (12)	8% (4)	59% (28)
E. C. Rural Disapproved	4% (2)	20% (10)	4% (2)	72% (34)

Table 6.27

Comparison of Flint and Eau Claire Interview Responses

Concerning Time Spent by Mother With Child

Question: (Eau Claire Item-Mother 19, Flint Table 29) "Do you have enough time to talk with your child and much time to do things with him?"

Response Options:

1. Enough time
2. Not enough time
3. No answer

Group	Response Frequencies 1	2	3
Flint Approved	54% (51)	43% (40)	3% (3)
E. C. Approved	80% (77)	20% (19)	0% (0)
E. C. Urban Approved	85% (41)	15% (7)	0% (0)
E. C. Rural Approved	75% (36)	25% (12)	0% (0)
Flint Disapproved	46% (42)	52% (47)	2% (2)
E. C. Disapproved	71% (68)	27% (26)	2% (2)
E. C. Urban Disapproved	73% (35)	25% (12)	2% (1)
E. C. Rural Disapproved	69% (33)	29% (14)	2% (1)

Table 6.28

Comparison of Flint and Eau Claire Interview Responses

Concerning Time Spent by Father With Child

Question: (Eau Claire Item-Father 21, Flint Table 29) "Do you have enough time to talk with your child and much time to do things with him?"

Response Options:

1. Enough time
2. Not enough time
3. No answer

Group	Response Frequencies 1	2	3
Flint Approved	36% (31)	59% (51)	5% (4)
E. C. Approved	52% (50)	37% (35)	11% (11)
E. C. Urban Approved	59% (28)	31% (15)	10% (5)
E. C. Rural Approved	46% (22)	42% (20)	12% (6)
Flint Disapproved	42% (33)	57% (45)	1% (1)
E. C. Disapproved	58% (55)	33% (32)	9% (9)
E. C. Urban Disapproved	60% (29)	27% (13)	13% (6)
E. C. Rural Disapproved	54% (26)	40% (19)	6% (3)

Table 6.29

Comparison of Flint and Eau Claire Interview Responses

by Child Concerning Time Spent With Father

Question: (Eau Claire Item-Child 3, Flint Table 32) "About how much time do you spend doing things with your father?"

Response Options:

1. Quite a bit (over 20 hours a week)
2. Not much, but reason offered
3. Not much, no reason given
4. No time
5. No answer

Group	Response Frequencies 1	2	3	4	5
Flint Approved	15% (14)	24% (23)	37% (36)	17% (16)	7% (7)
E. C. Approved	39% (37)	31% (30)	24% (23)	0% (0)	6% (6)
E. C. Urban Approved	32% (15)	35% (17)	23% (11)	0% (0)	10% (5)
E. C. Rural Approved	45% (22)	28% (13)	25% (12)	0% (0)	2% (1)
Flint Disapproved	17% (16)	19% (18)	47% (45)	15% (14)	2% (2)
E. C. Disapproved	26% (25)	36% (34)	33% (32)	0% (0)	5% (5)
E. C. Urban Disapproved	25% (12)	35% (17)	32% (15)	0% (0)	8% (4)
E. C. Rural Disapproved	28% (13)	35% (17)	35% (17)	0% (0)	2% (1)

Table 6.30

Comparison of Flint and Eau Claire Interview Responses by Mothers Concerning Least Pleasant Thing About Children

Question: (Eau Claire Item-Mother 22, Flint Table 39) "What is the least pleasant thing about having children?"

Response Options:
1. More tied down, expenses
2. How to handle them, worry problems
3. Nothing
4. Other, no answer

Group	Response Frequencies 1	2	3	4
Flint Approved	28% (26)	36% (34)	21% (20)	15% (14)
E. C. Approved	9% (9)	53% (51)	19% (18)	19% (18)
E. C. Urban Approved	6% (3)	56% (27)	23% (11)	15% (7)
E. C. Rural Approved	12% (6)	50% (24)	15% (7)	23% (11)
Flint Disapproved	16% (15)	49% (45)	12% (11)	22% (20)
E. C. Disapproved	15% (14)	59% (56)	13% (13)	13% (13)
E. C. Urban Di pproved	17% (8)	63% (30)	8% (4)	12% (6)
E. C. Rural Disapproved	12% (6)	54% (26)	19% (9)	15% (7)

Table 6.31

Comparison of Flint and Eau Claire Interview Responses

by Fathers Concerning Least Pleasant Thing

About Children

Question: (Eau Claire Item-Father 24, Flint Table 39) "What is the least pleasant thing about having children?"

Response Options:

1. More tied down, expenses
2. How to handle them, worry problems
3. Nothing
4. Other
5. Don't know, no answer

Group	Response Frequencies 1	2	3	4	5
Flint Approved	29% (25)	38% (33)	20% (17)	5% (5)	7% (6)
E. C. Approved	22% (21)	25% (24)	27% (26)	11% (11)	15% (14)
E. C. Urban Approved	16% (8)	23% (11)	29% (14)	19% (9)	13% (6)
E. C. Rural Approved	27% (13)	27% (13)	25% (12)	4% (2)	17% (8)
Flint Disapproved	28% (22)	41% (33)	15% (12)	13% (10)	3% (2)
E. C. Disapproved	31% (29)	33% (32)	18% (17)	8% (8)	10% (10)
E. C. Urban Disapproved	25% (12)	33% (16)	13% (6)	13% (6)	16% (8)
E. C. Rural Disapproved	35% (17)	33% (16)	24% (11)	4% (2)	4% (2)

Table 6.32

Comparison of Flint and Eau Claire Interviewer Ratings of Mother's Expressions of Approval and Disapproval of Child

Question: (Eau Claire Item-Int. A16-Mother, Flint Table 37) "Expression of approval or disapproval of child by mother."

Response Options:

1. Mother approves, expresses pleasure
2. Mother disapproves, expresses displeasure
3. Mixed
4. No answer

Group	Response Frequencies 1	2	3	4
Flint Approved	59% (55)	17% (16)	20% (19)	4% (4)
E. C. Approved	87% (83)	4% (4)	9% (9)	0% (0)
E. C. Urban Approved	94% (45)	0% (0)	6% (3)	0% (0)
E. C. Rural Approved	79% (38)	8% (4)	13% (6)	0% (0)
Flint Disapproved	43% (39)	40% (36)	13% (12)	4% (4)
E. C. Disapproved	65% (62)	6% (6)	27% (26)	2% (2)
E. C. Urban Disapproved	71% (34)	6% (3)	21% (10)	2% (1)
E. C. Rural Disapproved	59% (28)	6% (3)	33% (16)	2% (1)

Table 6.33

Comparison of Flint and Eau Claire Interviewer Ratings of Father's Expressions of Approval and Disapproval of Child

Question: (Eau Claire Item-Int. A16-Father, Flint Table 37) "Expression of approval or disapproval of child by father."

Response Options:
1. Father approves, expresses pleasure
2. Father disapproves, expresses displeasure
3. Mixed
4. No answer

Group	Response Frequencies 1	2	3	4
Flint Approved	69% (59)	18% (16)	6% (5)	7% (6)
E. C. Approved	78% (75)	2% (2)	13% (12)	7% (7)
E. C. Urban Approved	82% (39)	2% (1)	6% (3)	10% (5)
E. C. Rural Approved	75% (36)	2% (1)	19% (9)	4% (2)
Flint Disapproved	53% (42)	30% (24)	9% (7)	8% (6)
E. C. Disapproved	59% (56)	5% (5)	30% (29)	6% (6)
E. C. Urban Disapproved	65% (31)	4% (2)	21% (10)	10% (5)
E. C. Rural Disapproved	52% (25)	6% (3)	40% (19)	2% (1)

Table 6.34

Comparison of Flint and Eau Claire Interviewer Ratings of

Parents' Communication Regarding Child

Question: (Eau Claire Item-Int. A28, Flint Table 36) "Communication of parents regarding child."

Response Options:

1. Mother and father talk things over usually
2. Sometimes mother and father talk things over
3. Each acts independently
4. No answer

Group	Response Frequencies 1	2	3	4
Flint Approved	44% (41)	21% (20)	19% (18)	16% (15)
E. C. Approved	59% (57)	32% (30)	4% (4)	5% (5)
E. C. Urban Approved	71% (34)	19% (9)	2% (1)	8% (4)
E. C. Rural Approved	48% (23)	44% (21)	6% (3)	2% (1)
Flint Disapproved	32% (29)	15% (14)	34% (31)	19% (17)
E. C. Disapproved	37% (35)	50% (48)	5% (5)	8% (8)
E. C. Urban Disapproved	40% (19)	46% (22)	2% (1)	12% (6)
E. C. Rural Disapproved	33% (16)	55% (26)	8% (4)	4% (2)

Table 6.35

Comparison of Flint and Eau Claire Interviewer Ratings

of Child-Parent Relationship

Question: (Eau Claire Item-Int. B2, Flint Table 56) "Relation of child and parent."

Response Options:

1. Child feels close to parents
2. Child feels unsure or tolerated by parents
3. Child feels rejected, threatened
4. No answer

Group	Response Frequencies 1	2	3	4
Flint Approved	38% (36)	22% (21)	3% (3)	37% (36)
E. C. Approved	70% (67)	29% (28)	1% (1)	0% (0)
E. C. Urban Approved	77% (37)	23% (11)	0% (0)	0% (0)
E. C. Rural Approved	63% (30)	35% (17)	2% (1)	0% (0)
Flint Disapproved	26% (25)	29% (28)	5% (5)	39% (37)
E. C. Disapproved	49% (47)	41% (39)	10% (10)	0 (0)
E. C. Urban Disapproved	52% (25)	38% (18)	10% (5)	0% (0)
E. C. Rural Disapproved	46% (22)	44% (21)	10% (5)	0% (0)

Table 6.36

Comparison of Flint and Eau Claire Interview Responses

by Child Concerning Punishment

Question: (Eau Claire Item-Child 12, Flint Table 47) "About how often do you get punished for something?"

Response Options:

1. Once a week or oftener
2. About once a month, now and then
3. Hardly ever
4. No answer

Group	Response Frequencies 1	2	3	4
Flint Approved	17% (16)	32% (31)	47% (45)	4% (4)
E. C. Approved	50% (48)	33% (32)	16% (15)	1% (1)
E. C. Urban Approved	41% (20)	40% (19)	19% (9)	0% (0)
E. C. Rural Approved	58% (28)	27% (13)	13% (6)	2% (1)
Flint Disapproved	29% (28)	29% (28)	36% (34)	5% (5)
E. C. Disapproved	48% (46)	39% (37)	12% (12)	1% (1)
E. C. Urban Disapproved	48% (23)	42% (20)	10% (5)	0% (0)
E. C. Rural Disapproved	48% (23)	35% (17)	15% (7)	2% (1)

Table 6.37

Comparison of Flint and Eau Claire Interview Responses

by Ninth Grade Children Concerning Dating

Question: (Eau Claire Item-Child 35, Flint Table 78) "Do you have dates?"
Response Options:

1. Yes
2. No (Mother forbids, father forbids, father too strict, mother too strict, not interested)

Group	Response Frequencies 1	2
Flint Approved	39% (37)	61% (59)
E. C. Approved	6% (6)	94% (90)
E. C. Urban Approved	6% (3)	94% (45)
E. C. Rural Approved	6% (3)	94% (45)
Flint Disapproved	55% (52)	45% (43)
E. C. Disapproved	22% (21)	78% (75)
E. C. Urban Disapproved	25% (12)	75% (36)
E. C. Rural Disapproved	19% (9)	81% (39)

Table 6.38

Comparison of Flint and Eau Claire Interview Responses

by Child Concerning Child's Friends

Question: (Eau Claire Item-Child 30, Flint Table 75) "Do you have a close friend?"

Response Options:

1. Yes
2. No
3. No answer

Group	Response Frequencies 1	2	3
Flint Approved	58% (56)	42% (40)	0% (0)
E. C. Approved	84% (81)	14% (13)	2% (2)
E. C. Urban Approved	90% (43)	6% (3)	4% (2)
E. C. Rural Approved	79% (38)	21% (10)	0% (0)
Flint Disapproved	61% (58)	38% (36)	1% (1)
E. C. Disapproved	87% (83)	10% (10)	3% (3)
E. C. Urban Disapproved	94% (45)	4% (2)	2% (1)
E. C. Rural Disapproved	79% (38)	17% (8)	4% (2)

Chapter 7

Analysis of An Individual Case in Relation to Major Themes and Overall Conclusions of the Study

In the account describing the first phase of this research effort (Thurston, Feldhusen, and Benning, 1964), some attention was paid to the development of a theoretical position which would allow for a greater understanding of aggressive behavior as it occurred in the classroom and elsewhere. Primary among the concepts employed in this effort were these involving predisposition and precipitation. While predisposition often refers to a genetically-determined characteristic of the individual, its meaning was expanded in this research to include learned or acquired tendencies as well. Thus, the stable and enduring learned aspects of the individual's personality would also be referred to as predispositions. Predispositions are the persistent and often unconscious motivations which direct the individual's behavior as he operates in our society. The precipitations, on the other hand, are external to the individual. They are the stimulus elements and complexes of the immediate or continuing environments within which the individual lives. As an illustration, there is the long-range predisposition to aggression which, coupled with the immediate precipitating stimulus of being insulted, causes an individual to attack the insulter.

In the broadest sense, the research involving classroom aggression can be described in these terms of predispositions and precipitations. While acknowledging differences among schools, classrooms, and teachers, the classroom environments were assumed to have sufficient similarity to constitute a more or less constant precipitating circumstance. With the

precipitations having constancy to a considerable degree, the research effort was then addressed to identifying and assessing important psychosocial factors associated with the development of either approved (nonaggressive) or disapproved (aggressive) behavior by students when confronted with an essentially common precipitating circumstance. These factors were regarded as indirect indices of the predispositions of these children to aggress. For some of these factors, such as those involving the Glueck Ratings, the behavior evaluated was viewed primarily in terms of a causal relationship in the development of the predisposition. In other instances, such as the KD Proneness Scale, Sentence Completion Test, and Situation Exercises, the basic purpose was to evaluate techniques which might assess significant elements of this predisposition to aggress.

In research such as this, it was believed essential to study large groups of individuals in order to be able to make the generalizations toward which science aims. Using only a single person as a subject for research would be a very risky way of testing any hypothesis. Yet it is also important to take proper precautions so that the individual is not lost in the shuffle of evaluating groups of individuals. It is to this problem that the current chapter is addressed.

The behavior of any individual at a given time takes form as a result of the unique interaction of predisposing factors and precipitating circumstances. To understand the classroom behavior of a given child, it is essential to have a knowledge of the manner in which significant factors and circumstances interact with unique individual factors to produce such behavior. With this background knowledge it is then possible to develop insights into the unique behavior of the individual under study.

Based on an earlier analysis of group data concerning classroom

aggression (Thurston, Feldhusen, and Benning, 1964), the composite picture of the child who persistently misbehaved in class showed the following:

1. The father's discipline was either overstrict, lax, or erratic.
2. The mother's supervision was unsuitable or fair.
3. The father and mother were indifferent or hostile to the child.
4. The family was only somewhat or not at all cohesive.
5. The parents failed to talk over problems regarding the child with one another.
6. The parents did not enjoy close, equal relationships.
7. The mother and father disapproved of many things about the child.
8. During contacts with the research interviewer, the child was inclined to be nervous or fidgety.
9. The child felt less close to his parents.
10. The father and mother (if she is working) were engaged in lower level occupations.
11. The father and mother were apt to have less education.
12. The child's IQ was apt to be lower.

In addition, the research revealed what the disapproved children's performance on (1) the KD Proneness Scale, (2) the Sentence Completion test, (3) the Situation Exercises, (4) reading achievement, and (5) arithmetic achievement was characteristically different from that which was forthcoming from approved children.

A case was selected at random to indicate the nature of some of these specific factors as they manifest themselves in relation to one another and

to other factors which, while having little general significance, may be crucial in an individual case. A sixth grade youngster who was nominated by his teacher as persistently exhibiting socially disapproved behavior in the classroom and his family become the focus of this study. The factors will be presented in the same order as the composite picture which came before. Changes were made in order to insure anonymity for the child and his family. A plus (+) before the number will indicate the presence of a factor associated with classroom misbehavior, i.e. the predisposition to aggress. A minus sign (-) will indicate the absence of such a factor for this child.

The Case of Ross K.

\+ 1. The father's discipline was rated as erratic (Glueck Factor).

Interviewer's report:

"From the father's report, it sounds as though he angers quickly and is easily given to physical punishment. The mother's and the child's reports suggest he is not quite that "rough" and is more given to an uneven type of discipline. He feels that the mother gets "into an uproar" too quickly but he does not interfere. He seems to become upset about such misbehaviors as wild rowdyism, smoking, and loud noises while watching TV."

\+ 2. The supervision of the child by the mother was rated as unsuitable (Glueck Factor).

Interviewer's report:

"The children are essentially undisciplined and unkempt. They were permitted most any behavior and used very bad language. The mother says that she supervises the boy's

activities (where he goes, who he stays with). However, the boy implies that if he talks to the mother or teases to go to the home of a friend who the mother feels is a bad boy, he sometimes can. He also suggests that he is allowed to ride with a group of boys at night."

- 3A. The affection of the father for the child was rated as warm (Glueck Factor).

Interviewer's report:

"This man seems soft spoken and relatively easy going with occasional outbursts of temper. The father's warmth was apparent when he discussed the child's difficulty with school. When the father describes how good natured the boy is, there is real warmth, as well as in the way he smiles at him. This is not as apparent in his relationship to his other children. The boy, in turn, describes with real pleasure, recreations which he enjoys with the father."

- 3B. The affection of the mother for the child was rated as warm (Glueck Factor).

Interviewer's report:

The mother's eyes dance with delight when she looks at her son. The boy reports his misdemeanors to her first many times. However, his more reckless misbehaviors might be reported to the father first. She seemed inclined to blame other children for the boy's difficulties. She is demonstrative in expressing approval. The boy seems to be the mother's and the father's favorite. When he talks to them, they respond warmly. There was much evidence of

this in their listening to him and in joking with him."

- 4. The family cohesion was rated as marked (Glueck Factor). Interviewer's report:

"The family members help each other and are close to one another. They belong to no organizations and have few friends. Thus, they are closer to one another. The boy, however, associates some with other boys and girls."

- 5. The parents talk over problems concerning the child with one another (Interviewer judgment).

+ 6. The parents do not have a close, equalitarian relationship (Interviewer judgment).

- 7. The parents approved and expressed pleasure regarding the child (Interviewer judgment).

- 8. The child had average poise during the interview (Interviewer judgment).

- 9. The child felt close to his parents (Interviewer judgment).

- 10. The mother did not work. The father was employed as an unskilled laborer.

+ 11. The mother had completed the sixth grade while the father finished the seventh.

+ 12. The child's IQ was 93 as measured by the California Test of Mental Maturity.

+ A. The child's KD Proneness Scale score of -3 was above (more delinquency prone) the average for sixth grade, disapproved boys. It should be noted, however, that the KD Proneness Scale does not differentiate the approved and disapproved children at this grade level as well as at the third or ninth grades.

- B. The child's Sentence Completion Test was one of the lowest (less associated with classroom misbehavior) of all the boys in the study.

+ C. The Adaptive Score of the Situation Exercises for this child was 9.35 which was considerably in excess of the mean of sixth graders (7.56). Even though the Adaptive Scores did not differentiate approved from disapproved youngsters at a statistically significant level of confidence, higher scores were more often characteristic of the disapproved.

- D. The child's performance on a reading achievement test was exactly that which might have been expected in terms of his grade level. He was only two months below these expectations on an arithmetic test.

The Glueck total score for this individual is high and predictive of delinquency and the development of classroom misbehavior and other forms of aggression. The erratic discipline of the father and the unsuitable supervision by the mother were given maximum Glueck scorings. These bad ratings more than offset the strength observed in the warm affection of the parents and the general cohesiveness of the family. The boy's intelligence represents another disadvantage. According to the California Test of Mental Maturity, he has an IQ of 93. However, he is operating at a somewhat higher level in arithmetic and reading than might be expected on the basis of this score. In view of the boy's scrawly and virtually incoherent performance on the Sentence Completion Test and Situation Exercises, this "average" performance would be most unexpected.

It would be of interest to obtain another estimate of his level of intellectual functioning by means of an individual intelligence test.

Re-testing in the areas of arithmetic and reading would also appear advisable. If the results of this previous testing are substantiated by the new evaluation, one might wish to make further inquiry to discover the classroom circumstances which precipitate this "overachievement."

Perhaps the child's classroom misbehavior constitutes a form of rebellion against an overpressing authority. If such is the case, his retaliation is by and large indirect. His misbehaviors tend to be directed at other students or are of a rather devious sort. His teacher reported that he quarrels, lies, dominates, deceives, bullies and fights with his classmates, and is rude. None of these take the form of a direct confrontation with the teacher and the discipline she represents. His behavior may take the form of a deviously aggressive reaction to the frustration of the classroom. If one assumes that ineffective parental behavior and negative family background predispositions may produce several forms of child behavior, the present case illustrates the production of partially good behavior. His school achievement and reactions toward the teacher appear quite good.

It would seem important to test the hypothesis that his aggressive classroom behavior may serve powerful attention - getting needs for this boy. Additional collateral information would serve to explore this possibility. It should be emphasized, however, that additional data should always be regarded as helpful in an interpretive sense either to affirm or deny certain possibilities as they apply to the child. 1) He is the oldest child. From an Adlerian point of view, he may have received so much attention while he was the only child as to suggest to him that he was dethroned from his favored position by the birth of subsequent children. He may hate people and feel generally insecure, according to Adler (Hall and

Lindzey, 1957). 2) Although he has three brothers and three sisters, he states in response to individual items on the KD Proneness Scale that "you have lots more fun if you live in a family with only one brother or sister" and "the most popular boys are ones who almost always get into mischief." There are strong indications that he does not have the mental capacity to win high-level attention through academic achievement. 3) Although on the KD he says, "On my report card, I usually get..... mostly good marks," scholastic achievement does not appear to be valued particularly in his family. Hard work around home is more prestigeful in the eyes of his family. 4) His life is home-centered. In his highly cohesive family, attention or non-attention from parents might loom larger to him than in a family with wider interests and activities. 5) His misbehavior may well be reinforced to some extent by his mother and father. While both seem to be displeased with many of the boy's actions, there is some indication that they may covertly reinforce some misbehavior on the part of the boy.

The nature of this family and its pattern of living is such as to limit the learning of behavior that will gain social approval in the outer world. The child gets attention from parents by misbehaving generally and fighting with his brothers and sisters. Elements of both these mechanisms may be evident in his behavior at school. He gains attention from teachers and classmates through misbehaving and from classmates more specifically by attempting to beat them up. Such behavior also fulfills a need to express the aggression which emerges from the frustrations of these otherwise ineffectual methods of gaining attention. His increasing freedom as he grows older will more than likely enable him to increase the range of his misbehavior without too much development of more constructive and socially approved behaviors.

Recommendations:

Central to remediation of the boy's difficulties would be the discipline by the father and by the mother. It would be necessary to develop insights into their attitudes regarding discipline and the impact of these attitudes upon the child. Simple admonitions to the parents to be consistent in their discipline would probably not be effective. The boy's needs for attention or recognition appears to be great. His ability to work appears to be his primary virtue. However, his achievement in school ought to gain recognition from his teachers. It would appear, however, that he may regard hard work as basic to gaining acceptance by his parents even though there are strong indications that they have a strong affection for him independent of this strength in the child.

The family generally could profit from a broadening of interests and activities. Increased participation in school, church, or other activities would be recommended. In this connection, the mother indicated that one of the younger children seemed to be gaining a great deal from participation in a local youth organization.

Therapeutic intervention should probably have been undertaken much earlier in his life. Any efforts to correct his difficulties would now encounter distinct disadvantages, namely, the strength of the predispositions and the nature of the enduring circumstances which have engendered them.

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Chapter 8

Interviewer Reliability

In much social and psychological research there is need for only minimal interviewer-interviewee contact. Often the procedures and questions are so highly specified that researchers regard the data gathering as a semi-automatic activity which can be handled by reasonably intelligent individuals without much training. Few researchers bother to detail the manner in which they select, train, or supervise their data gatherers despite the fact that the whole research often rests upon the adequacy with which their duties are performed. Increasing attention should be paid to this important area at all levels of data gathering from those requiring the mere recording of responses to the most complex ratings and judgments. It is in this latter, more complicated circumstance that the greatest danger exists for the gathering of unreliable data. The Eau Claire County Youth Study made considerable demands upon the interviewer for close, extended contact with children and their families. Four to eight hours were spent in conducting interviews and tests with the mother, father, and child. In addition, the child and parents had to be rated on twelve characteristics. Because of the importance of this phase of the research, much attention was given to the selection, training, and supervision of interviewers. The reliability of these procedures has already received some attention (Thurston, Feldhusen, and Benning, 1964). This whole area, however, is so in need of attention that additional treatment and discussion is clearly indicated. It is to that end that this chapter is directed.

Review of Expert Opinion on Interview Data

McCord and McCord (1961) summarised quite negative evaluations from three other writers-researchers on the validity of interview data. Ego-involvement of respondents is often mentioned as the principal source of response bias or a generalized response set. From their own research on interview versus observation, McCord and McCord concluded that parents failed to reveal child rejection in interviews and that children did not reveal negative attitudes toward their parents. However, parents revealed their attitudes toward one another quite accurately. They also found that role differentiations between mother and father were exaggerated in interviews with mothers tending to portray their husbands as more dominant than observation revealed them to be. McCord and McCord concluded that the validity of interviews was reduced by the tendency of the interviewee to give responses which conform to cultural stereotypes.

More recently Yarrow (1963) discussed the problems of research in which interview data was employed and concluded that the validity of conclusions based on the research was questionable. She noted the dual problems of ego-involvement of respondents and the tendency on their part to report what they think they should report or to respond in terms of cultural stereotypes. She also noted that interview questions frequently require excessively fine or complicated discriminations on the part of the respondent. She also criticized the tendency to require respondents to reduce complex behaviors to a single descriptive response category or statement when in reality the behavior being rated may be subject to extreme variation or multi-modality. In addition, the strain upon the respondents' memory is believed to be severe inasmuch as interviewees are often required to give quite precise reports concerning events which occurred five to ten

years previously. Commenting on her own research, however, she noted that interview data on child behavior collected at two different times showed from 50 to 75 percent consistency and rarely completely opposite impressions.

Rosenthal has demonstrated experimentally that a number of attributes of the data-gatherer such as expectations concerning the outcomes of a research (Rosenthal, 1964A), verbal conditioning (Rosenthal, 1964B), data-gatherer attributes such as sex and likeability (Rosenthal, 1963A), and data-gatherer modeling effects (Rosenthal, 1963B) bias the results of supposedly highly objective experimentation. The potential effect of all of these factors in data-gatherers using the interview technique is even greater.

In summary, it appears to be true that interview data and generalizations derived from them must be regarded with utmost caution. The potential for biased, unreliable data and consequent invalid generalization is great.

Estimating Reliability of the Interviewer Ratings in The Eau Claire County Youth Study

The reliability of the interview data gathered for the Eau Claire County Youth Study was estimated by determining the percentage of agreement between the ratings made by pairs of interviewers of the same interview material for 48 of the 384 cases. Two completed interviews were selected from each of the 16 cases in a cell determined by behavioral status, grade, sex, and urban-rural location. A completed interview included the father, mother, and child questionnaires and summary tables, the Sentence Completion responses, the Situation Exercise responses, the KD Proneness responses, and the 12 family interaction ratings, five of which were ratings of Glueck Factors and seven were otherwise called interviewer ratings.

In preparing an interview for assignment to the second interviewer, the

tables and ratings which had been made by the original interviewer were removed. The second interviewer was given only the completed questionnaires and tests, unaltered except for the removal of the identification. From the information which these showed, and from this source alone, the second interviewer completed the blank tables (child and parents) and the family interaction ratings on the Glueck and Interviewer Ratings. The second interviewer was told to work independently and to return the completed case in two days.

Table 8.1 shows the percentages of agreement between the ratings made by each pair of interviewers (original interviewer and second interviewer) on the Glueck Factors, the Interviewer Ratings, and the questionnaire summary tables fcr the 48 cases. The base of comparison in each case was the first interviewer whose data was actually used in the study.

Close inspection of Table 8.1 reveals that the Glueck and Interviewer Ratings of the disapproved children consistently produced lower percentages of agreement. For example, at the third grade level the eight pairs of interviewers who scored the approved cases agreed 68 percent of the time on the Glueck ratings, but the eight pairs who did the disapproved cases agreed only 50 percent of the time. Similarly, for the Interviewer Ratings, there was 80 percent agreement on approved cases but only 55 percent agreement on disapproved cases. Over all grades the agreement on approved cases for Glueck Ratings was 78 percent, for disapproved cases, 68 percent. For Interviewer Ratings, the overall agreement for approved cases was 73 percent, for disapproved, 54 percent. The overall agreement for all 48 cases was 73 percent for Glueck Ratings and 64 percent for Interviewer Ratings.

The finding of 73 percent agreement on Glueck Ratings was judged to provide minimum assurance of reliability of this delinquency prediction

data. Since the Glueck ratings were variables of primary importance, this evidence was reassuring. The lower agreement on Interviewer Ratings was judged to be a less serious problem because these were orginally secured as a secondary interest in replicating some of the Flint Youth Study Findings (1959). The finding of lower reliability for the disapproved cases has particular implications for research in the area of delinquency. Much of the research in this area is carried out with delinquent samples but with no controls whose behavior is socially approved. Thus, the bulk of data comes from a less reliable source, namely interviews with children whose behavior is socially disapproved or delinquent.and interviews with their parents.

The percentages of agreement on the questionnaire data as summarized in Child, Father, and Mother Tables was uniformly high. It should be noted that the questionnaires represented quite factual data and required only a minimum of interviewer judgment while the ratings described above required much judgment. The composite agreement was 83 percent for approved and disapproved cases and for each of the three grade levels. It was concluded that the interviewers had made quite accurate table classifications of all of the questionnaire data.

Agreement Among Observers as a Reliability Criterion

The discussion by Yarrow (1963) mentioned earlier in this chapter proposed that reports be obtained from the father, mother, and child to determine if there would be agreement among observers in responses to the same question. This would afford another way of evaluating the reliability of interview data. Yarrow suggested that confidence in interview data could be increased greatly if there would be sufficient agreement.

Interview questionnaires were administered separately to the mother, the father, and the child in the Eau Claire County Youth Study and several questions were similar on the questionnaires for two or three of the respondents. Accordingly three questions were selected for an analysis of the agreement among respondents.

The first question was concerned with the parents' method or habit of punishment. The question to the mother and father was "What did you do when your child refused to do what you wanted him to do?" To the child, the question was "If you do something wrong, how do you get punished?" Four response categories were used: (1) physical punishment; (2) talk, moralize or reason; (3) threaten, scold, or order; and (4) no classifiable response. Among the three respondents there was agreement on the response category for 48 percent of the 384 family-cases. For selected pairs of respondents, the agreement levels were always higher. The agreement between all children and fathers was 62 percent, between all children and mothers, 68 percent, and between all pairs of mothers and fathers, 61 percent. The probability of three people agreeing by chance when each gives one response is two percent, and for two people it is six percent. Some of the respondents have more than one response and the average was 1.4 responses per person. For three people giving up to two responses each, the probability of agreement by chance is 12 percent and for the two people giving up to two responses each, it is 25 percent. In all cases the extent of agreement found in this analysis is greater than might be expected on the basis of chance alone.

Another question was given to both the mother and father. It was stated as follows: "What did your child do at school that you did not approv of?" The response categories were: (1) truant or tardy, (2) fighting or

authority problem, (3) not doing well or no interest, (4) no problem, and (5) do not know or no answer given. A total of 1.1 responses per respondent was given. Thus, the nearest applicable whole-number probability would be for one response per subject. Since there are five options the probability of agreement by chance is four percent. It was found that mothers and fathers were in agreement in their response to this question 65 percent of the time.

A third mutual question was concerned with the parents' aims in life for the child and was stated as follows: "In bringing up your children, what do you try to do, what are your general aims?" The responses were classified as follows: (1) religious and moral; (2) good social relationships; (3) good personality; (4) material success; or (5) no classifiable answer. A total of 1.9 responses was given by each mother or father. Hence, the probable agreements by chance would be about 20 percent. It was found, however, that mothers and fathers were in agreement on one or more of the aims 69 percent of the time.

These results suggest two things. First, that when mothers and fathers and children report on either objectively definable behavior or such as how they punished or what school behavior problems were or on the more nebulous characteristic of their aims in life for the child, there will be agreement among respondents far above the chance level. Second, the percentages of agreement are still so far below perfect agreement that the practitioner should be exceedingly cautious in generalizing from the interview data to actual behaviors.

The Effect of Cultural Stereotypes on the Interview Responses

McCord and McCord (1961) suggested that parents tend to make their picture of family life conform to cultural stereotypes. This is to say that

the mothers and fathers would give answers to the interviewer which they would feel were socially acceptable or desirable. Accordingly, an effort was made in this study to ascertain how much this tendency might have effected the responses.

A group of 20 graduate students who were enrolled in an advanced course in educational psychology were given 49 of the interview questions for the child, mother, and father and asked to check the answers which were socially most acceptable. Questions were selected for which it was felt that the opportunity for the social acceptability effect would be at a maximum. For example, the following question and response options were used: "What else besides the family has a favorable influence on your child? (1) Church, (2) School, (3) Youth Organizations, (4) Relatives, or (5) Other." An illustrative comparison is given for this item in Table 8.2. It can be seen that there is substantial disagreement between the actual percentage of agreement for "Church" and for "Relatives" and the rating of social desirability by graduate students. Fifty-eight percent of the graduate students select "Church" as the most desirable response but only 29 percent of fathers gave this response. Similarly, the graduate students never checked "Relatives" but "Relatives" was in fact selected by 16 percent of the fathers.

As a summary statistic, the discrepancies between the percentage of study subjects giving each response and the percentage of graduate students selecting it as socially most desirable were calculated. For the 49 questions, there was a total of 304 response options. For a total of 135 of the 304 response options, or 46 percent of them, the difference in percentage between the percentage of graduate students selecting the option as socially desirable and study subjects giving it as a response was eleven or

more percentage points. Conversely, for 169 of the options or 56 percent, the discrepancy was ten percentage points or less. The frequency distribution of discrepancies is given in Table 8.3. It is obvious that for many options the difference is substantial. Differences in the range of eleven to twenty percentage points account for 26 percent of the differences while nine percent are in the 21 to 30 point range. For three of the options the difference was large enough to be included in the 71 to 80 point difference class.

These results indicate that the mothers, fathers, and children who were subjects in this study did not give responses to the interview questionnaires which were essentially consistent with what might be considered the socially desirable or culturally stereotyped responses. There were many large differences between given responses and those rated socially desirable. The test of this question does not, of course, require perfect disagreement. It would be absurd to argue that the given responses, if valid indicators of parental attitudes and behavior, should be totally different from the cultural stereotype. In truth, these were all parents who should theoretically be guided somewhat or much in their behavior as parents by cultural concepts of correct parental behavior. The proper conclusion seems to be that they did not respond as rubber-stamps of the cultural stereotype. Presumably the discrepancy of their responses supports the notion that their responses were valid indicators of their beliefs, attitudes, and behaviors.

Summary

The purpose of this chapter was to detail and discuss evidence regarding the reliability of data gathered by research interviewers. The discussion

is not intended solely to evaluate the practices employed in this study but also to show the types of checks which can be made on reliability of data and to show how the validity of generalizations must be qualified in terms of the demonstrated reliability of the data.

In previous writings it has been suggested that reliability of the data gathered can be increased by the careful attention to the selection, training, and supervision of the interviewers. In this chapter, formal reliability tests of the inter-rater type were described and the results were offered in support of the reliability of the data. However, it was also noted that data based on the socially disapproved portion of the sample were consistently less reliable than data based on the socially approved portion. In response to criticism of interview data as possibly just reflecting cultural stereotypes, an effort was described to check on this possible source of bias. Finally, in response to a suggestion by another research, an effort was made to determine the inter-respondent agreement on some items for which agreement would be predicted.

All of the evidence indicates that the data gathered in the Eau Claire County Youth Study is reasonably reliable or accurate and that valid generalizations, limited by evidence presented in this chapter and previous writings, could be made to comparable populations of subjects in similar situations.

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Table 8.1

Reliability Estimates Based on Percentage of Agreement Between 48 Pairs of Interviewers Scoring Independently

Group	N Cases	Glueck	Interviewer Ratings	Child Tables	Father Tables	Mother Tables	Composite Tables
3rd Grade	16	59%	62%	85%	83%	83%	83%
3rd Grade Approved	8	68%	65%	82%	81%	82%	82%
3rd Grade Disapp.	8	50%	58%	87%	84%	83%	85%
6th Grade	16	78%	68%	85%	82%	81%	83%
6th Grade Approved	8	80%	80%	85%	87%	81%	84%
6th Grade Disapp.	8	75%	55%	85%	77%	81%	81%
9th Grade	16	82%	62%	86%	82%	82%	83%
9th Grade Approved	8	85%	73%	84%	81%	82%	82%
9th Grade Disapp.	8	78%	50%	87%	83%	82%	84%
All Approveds	24	78%	73%	84%	83%	82%	83%
All Disapp.	24	68%	54%	86%	81%	82%	83%
All	48	73%	64%	85%	82%	82%	83%

Table 8.2

Response Distribution for 384 Subjects' Mothers and for 20 Graduate Students to a Selected Question*

Response Options	Percentage of Responses for All Ss in Study	Percentage Responses for 20 Graduate Students
Church	29%	58%
School	31%	26%
Youth Organizations	11%	11%
Relatives	16%	0%
Miscellaneous	8%	0%
No Answer	5%	5%

* Question: What also besides the family has a favorable influence on your child?

Table 8.3

Frequency Distribution of Differences in Percentage Points Between Graduate Students' Selection of Responses as Socially Desirable and Selection of the Option by Ss in the Study

Difference Between Graduate Students and Study Ss in Percentage Points	No. of Options for which the Difference was this large	Percentage that this is of total number of response options
0 - 10	169	56
11 - 20	79	26
21 - 30	29	9
31 - 40	12	4
41 - 50	6	2
51 - 60	4	1
61 - 70	2	1
71 - 80	3	1